

## New-York Book of Prices

for

Manufacturing Piano-fortes

by

The Society of Journeymen Piano-forte Makers

New York, 1835

## 25

Foreword by Henry Z. Steinway Introduction by Laurence Libin "When my great-grandfather Heinrich Engelhard Steinweg (1797-1871) arrived with his family in New York in 1850, preceded by his son Charles a year earlier, piano manufacture was already a big business in this city. How it grew to be that way is a long story, only partly told, but a major chapter in that progress is the document reproduced here. The 1835 Price Book of New York's Society of Journeymen Pianoforte Makers, known from only one surviving copy, gives uniquely detailed insight to the craft as it was carried on in the bustling manufactories that set the stage for Steinway's success. . . . To put the Price Book into a broad social perspective, Laurence Libin provides a panoramic but sharply-focused snapshot of life, work, and culture in New York about 1835. Drawing on many sources, he expertly outlines the conditions surrounding local piano manufacture, and shows that the journeymen's struggle for fair employment mirrored larger trends in the commercial and industrial development of antebellum New York." *From the Foreword by Henry Z. Steinway* 

"The social principle of man, reasonably exercised for any laudable object, must be for his individual and social advantage. . . . The Journeymen Piano-forte Makers, of the City of New-York, believed it necessary and expedient to form themselves into a Society, for the better regulating and equalizing their prices. The Society have, after much labour and expense, completed their Book of Prices, which will, they trust, be found as correct as the nature of the work would admit of, it being the first publication of the kind ever printed in the United States."

From the Preface to the Book of Prices

THE AMERICAN MUSICAL INSTRUMENT SOCIETY IS AN INTERNA-TIONAL ORGANIZATION FOUNDED IN 1971 TO PROMOTE THE STUDY OF THE HISTORY, DESIGN, AND USE OF MUSICAL INSTRUMENTS IN ALL CULTURES AND FROM ALL PERIODS.

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AMERICAN MUSICAL INSTRUMENT SOCIETY

### IN MEMORY OF Henry Ziegler Steinway 1915-2008

### 25

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# Contents

FORE	EWORI	)	•	•	•				•							•	•		•	•				5
PREF	ACE .															•								7
INTR	ODUC	TIO	Ν.													•				•				9
APPE Mu	NDIX I usic-rela	I: . .ted l	 istir	ıgs	in	 Loi	nga	wor	th's	s A	те	 eric	ran	Al	!mi	and	1c f	for	18	35			•	43
APPE We	NDIX I ell-mean	II: . t Adv	vice .	• • •	to (	 Ger	:ma	Ins,	tra	ıns	lat	ed	by	rL	yn	n 1	Ed	wa	ard	s I	But	tlei	•	49
SELE	CT BIB	LIO	GR	AF	Ю	Υ.																		57
THE	NEW-Y	ORI	K BO	C	Ж	OF	P P	RI	CE	S														61



Foreword

WHEN MY GREAT-GRANDFATHER HEINRICH ENGELHARD STEINWEG (1797-1871) arrived with his family in New York in 1850, preceded by his son Charles a year earlier, piano manufacture was already a big business in this city. How it grew to be that way is a long story, only partly told, but a major chapter in that progress is the document reproduced here. The 1835 Price Book of New York's Society of Journeymen Pianoforte Makers, known from only one surviving copy, gives uniquely detailed insight to the craft as it was carried on in the bustling manufactories that set the stage for Steinway's success. Coincidentally, this publication appeared in the same year that Heinrich reportedly opened his first piano workshop, in the town of Seesen, Germany.

The decade of the 1830s saw labor unrest in many American industries, and the Price Book is the response of one group of skilled craftsmen to what they thought was unfair compensation. In order to standardize their pay and protect themselves from being undercut by cheap competition, the journeymen piano makers set prices for almost every operation they performed. Thus they left us not only a measure of the effort they expended every step of the way, but also an unfamiliar working vocabulary and an inside look at the instruments they painstakingly produced. Still shadowy is the manner in which they organized, perhaps illegally, to confront employers with their Price Book, which they claimed was "the first publication of the kind ever printed in the United States."

To put the Price Book into a broad social perspective, Laurence Libin provides a panoramic but sharply-focused snapshot of life, work, and culture in New York about 1835. Drawing on many sources, he expertly outlines the conditions surrounding local piano manufacture, and shows that the journeymen's struggle for fair employment mirrored larger trends in the commercial and industrial development of antebellum New York. Especially interesting to me is Lynn Edwards Butler's translation of the "Well-Meant Advice" to prospective immigrants, published in 1833 by the German Society of New York City (Appendix II), a society with which my family later became involved. This cautionary pamphlet, which appeared in several later editions, reveals some of the same difficulties Heinrich and his family would have to overcome, and so underscores their courage and optimism in leaving their homeland for the turmoil of this great metropolis.

Henry Z. Steinway

OPPOSITE: Firth Hall & Pond Pianoforte and Music Warehouse, lithographed advertisement (detail), *ca.* 1835. Courtesy of The New-York Historical Society, 56736

Preface

BY SETTING FORTH STEP BY STEP THE PROCEDURES AND COSTS INVOLVED IN BUILDing pianos, the Price Book reproduced here offers detailed insight to the complicated process of producing instruments that were among the most sophisticated and highly prized products of nineteenth-century American technology. In so doing, the Price Book provides valuable information about antebellum woodworking in general, as carried out for example in Duncan Phyfe's renowned furniture manufactory. The journeymen piano makers' only partly successful effort to secure fair pay through uniform pricing testifies to the difficulty of wage negotiation and craft unionization during a turbulent period in urban American labor relations.

A few pages can barely sketch the circumstances surrounding this remarkable document. The following Introduction, organized into several overlapping sections, does not aim to present a comprehensive historical narrative, much less to discuss the specifics of piano technology or relate New York pianos to their repertoire. Rather, I have tried simply to outline a broad social context for understanding the Price Book's origin and purpose. Fuller accounts of life in New York City about 1835 appear in recent works cited in the Select Bibliography; I have drawn freely and appreciatively upon these authorities, particularly those named in my text. Modern publications, however, are no substitute for primary sources such as contemporary books, business records, census reports, diaries, directories, maps, newspapers, and pictures, which most vividly convey a sense of the city. Frances Trollope's Domestic Manners of the Americans (1832), for example, offers an English visitor's acute observations, while Philip Hone's and George Templeton Strong's lengthy manuscript diaries (both in The New-York Historical Society) record upper-class insiders' views, most useful here for their candid descriptions of musical activity. Longworth's American Almanac, New-York Register, and City Directory for 1835 provides vital data extracted in Appendix I.

For access to these materials I am especially grateful to colleagues at The New-York Historical Society. The translation appearing as Appendix II is chiefly the work of Lynn Edwards Butler, whom I thank for her kindness in allowing this important work to be included here. Often one cannot verify the accuracy of old documents, even official ones, but I must take responsibility for errors and shortcomings of interpretation. "New-York" was normally but not always hyphenated in 1835; I retain the inconsistent usage of my sources.

I thank George R. Goldner, Drue Heinz Chairman, Department of Drawings and Prints, The Metropolitan Museum of Art, for permission to investigate the only known example of the Price Book, in the Museum's Elisha Whittelsey Collection (purchase, The Elisha Whittelsey Fund, 1951; 51.579.1). Isaac Innes, who wrote his name repeatedly in this copy, once with the notation "New York Nov. 12th 1836," was probably its original owner. Its subsequent ownership is unknown, but I am tempted to suppose that it passed to Henry Hazelton, who became a prominent piano manufacturer and juror in the trial that convicted the corrupt mayor William M. "Boss" Tweed in 1873; the name "Henry" among pen-tries inside the back cover hints at this provenance. According to Nancy Groce, Hazelton first appears in New York directories in 1849 but had been apprenticed in 1831 to the firm of Dubois & Stodart; he might have been a son of Samuel Hazelton, a porterhouse proprietor. Using Hazelton's copy as his source, Daniel Spillane quoted an extract of the Price Book's preface in his *History of the American Pianoforte, Its Technical Development, and the Trade* (1890), the first such study—sadly, unreliable—to take notice of the book.

Cynthia Adams Hoover, emeritus curator of musical instruments in the Division of Cultural History, National Museum of American History, Smithsonian Institution, kindly lent the photographs of the Price Book reproduced here. But this edition is not strictly a facsimile; among other departures, several blank pages have been omitted, some images have been tidied up, the original size (8-3% by 5-1/4 inches) has been altered, and the (probably later) cardboard cover with marbled paper sides and red linen back has not been reproduced.

This unique document should interest labor historians, furniture and instrument collectors, woodworkers, and anyone involved with American music and pre-industrial technology, especially the piano's. The Price Book awaits thorough analysis from all these viewpoints. Perhaps more importantly, careful documentation and conservation of scarce antique pianos is essential if their music is ever again to be heard the way its composers and performers intended. I hope the present publication contributes toward that goal.

> Laurence Libin Honorary Curator, Steinway & Sons

## Introduction

### THE CITY

BY 1835, NEW YORK CITY HAD CONSOLIDATED ITS POSITION AS THE CULTURAL, COMmercial, and manufacturing capital of the young United States. The "Empire City"wholly contained by Manhattan Island until annexation of surrounding communities began in 1874—burgeoned after the War of 1812, when, among other economic mainstays, New York's dry-goods merchants profited greatly from the dumping of surplus British cloth. As the middle class prospered, so did luxury trades such as musical instrument manufacture. For example, spurred by a thirty per cent tariff on imported woodwinds enacted in 1816, Edward Riley Sr., a music retailer as well as performer, teacher, engraver, and publisher, began to sell instruments produced locally under his own brand; his sons Edward C., Frederick, and Henry followed suit. Riley Sr.'s sons-in-law John Firth and William Hall, woodwind makers themselves, formed their own joint venture in 1821 and brought their associate, the Albany businessman and musician Sylvanus B. Pond, into partnership in 1833, when the import tariff fell to twenty-five per cent. Firth Hall & Pond swiftly became one of America's leading music publishers and instrument manufacturers, with operations in Williamsburg, Long Island, and Litchfield ("Fluteville"), Connecticut.

The success of the Rileys and of Firth Hall & Pond exemplifies New York City's cultural attainment and economic progress, which, despite occasional setbacks, accelerated during the decade after 1825. In that year, the newly completed Erie Canal linked the Hudson (or North) River with Lake Erie, opening a vast inland market to the city's businesses. Canal boats cut transport cost, saved time, and offered a smoother ride than wagons, advantages that facilitated movement of bulky but delicate items such as furniture and pianos. During the same period, New York's shipping up and down the eastern seaboard and overseas increased substantially as port facilities improved. Shipbuilding and outfitting, warehousing, and maritime insurance underwriting grew concomitantly, and already by 1830 the seventy or more piers lining the East and Hudson rivers handled about forty per cent of the nation's foreign commerce. Imported goods worth nearly \$77 million entered the port of New York in 1834. This robust international trade, along with a flood of immigrants and transients, kept New Yorkers abreast of commercial and social trends abroad.

Complementing water-borne transport—increasingly on steam-powered vessels pioneered on the Hudson River by Robert Fulton—an expanding network of roads and rails joined the "Grand Emporium" (another sobriquet for Manhattan, as was "Gotham") to surrounding counties, the rest of New York State, and neighboring states. To move passengers more efficiently, horse-drawn rail cars began operating within lower Manhattan in 1832; three years later steam locomotives ran north to Harlem, accommodating a growing number of commuters. In 1833 express stagecoaches drove between New York and Washington, D.C. in just twenty hours. The Long Island Rail Road, chartered in 1834, improved connections to Long Island ferries, thence to Connecticut and ultimately to Boston. Bolstered by this increasingly far-flung and reliable distribution system, the city's manufacturers drew upon plentiful supplies of basic materials such as iron, lumber, and hides, cheap labor, and convenient financing.

Progress, however, was not smooth and not everyone benefited. About \$22.5 million in capital backed the city's commercial banks in 1835, roughly \$2.5 million less than in 1825. But although a serious recession in 1828-29 roiled banking and credit institutions, new ones tied to various trades proliferated, among them the Butchers' and Drovers' Bank (founded 1830), Mechanics' and Traders' Bank (1830), and Leather Manufacturers' Bank (1832). During the "Bank War" of 1833-34, New York replaced Philadelphia as the nation's financial hub, and soon nearly thirty banks and forty insurance companies competed in the city.

Nevertheless, high inflation in the early 1830s dramatically eroded buying power even as workers' income stagnated or fell. Indigents packed almshouses despite rules requiring even infirm and elderly inmates to work. To encourage "provident habits" in Manhattan's developing community of Greenwich Village, the Greenwich Savings Bank opened in 1833; the Bowery Savings Bank, another neighborhood institution, soon followed. The Hebrew Mutual Benefit Society (constituted 1826) and similar mutual aid societies provided loans to the needy within particular ethnic constituencies. Anxious to retain the upper hand, the Native American Democratic Association (1835)—the name referred not to Indians but to American-born whites—pointedly excluded immigrants from membership.

In 1831 New York State outlawed imprisonment for debt except in cases of fraud, but personal insolvency and unemployment, exacerbated by widespread gambling losses and drunkenness, worsened social problems. Efforts to outlaw lotteries, from which organizers skimmed enormous profits, occurred in 1833 and 1834, to little avail. The New-York City Temperance Society particularly targeted wage earners, upon whose sobriety economic growth depended; interestingly, music was touted as a temperance measure because of its "softening" influence. To help out-of-work craftsmen and tradesmen, in 1834 the New York Society for the Promotion of Knowledge and Industry opened a "General Intelligence Office," or employment agency, on Broadway, the city's main thoroughfare.

In the early 1830s, bank, insurance, and especially railroad stock transactions pumped up the New York Stock and Exchange Board (today the New York Stock Exchange), but lacking stringent regulation, traders readily manipulated stocks. For instance, in just a few weeks in 1834, the Wall Street speculator Jacob Little pushed the Morris Canal and Banking Company's share price from \$10 to \$185. Fortunes thus

### INTRODUCTION

amassed with little productive effort rankled hard-pressed workers and small businessmen. Wage earners especially loathed low-denomination "rag money," paper currency of no intrinsic worth that quickly depreciated. Nevertheless, as wealth rather than birth gradually came to define status, traditional class barriers steadily weakened, and democratic idealism nurtured social responsibility.

Private patronage supported many new educational, charitable, and religious institutions, among them the free-tuition University of the City of New York (today New York University, founded 1831), the New York Institute for the Blind (1832), the American Baptist Home Mission Society (1832), St. Joseph's Select School for Girls (1833), the Female Moral Reform Society (1834), the Society for the Relief of Half-Orphans (1835; a day-care center that enabled widows to work), and New York (today Union) Theological Seminary (1836). Both the university and the seminary received strong support from Presbyterians seeking alternatives to the older, Episcopalian-dominated Columbia College (today Columbia University) and General Theological Seminary. Appealing to a wider public, in 1835 the eighteen-year-old Lyceum of Natural History commissioned a new home at 561-63 Broadway designed by the architects Alexander Jackson Davis and Ithiel Town; its ground floor boasted the city's first metal storefronts. (Frances Trollope admired Broadway "for its length and breadth, its handsome shops, neat awnings, excellent *trottoir* [sidewalk], and well-dressed pedestrians.")

Some other learned organizations fared less well. The New-York Literary and Philosophical Society dissolved in 1834, apparently because many of its members had moved inconveniently far uptown. A short-lived Zoological Institute that opened in 1834 across the street from the Bowery Theatre was essentially a circus menagerie; like the American Museum (later owned by P.T. Barnum) on Broadway, the zoo charged visitors twenty-five cents to view its oddities. Whether operated for profit or not, most public educational and charitable institutions aimed implicitly to "civilize" New York's workers, many of them rustic illiterates unused to city ways, or recent immigrants who spoke little English.

As job training through formal apprenticeship declined, free public education assumed increasingly important functions. Among other objectives, school attendance kept lower-class youngsters out of the work force where they could have supplanted adults with families to support. The privately funded, nondenominational Public School Society operated fifty-six charity schools that in 1835 enrolled 13,879 pupils, just over half of them boys, and nearly nine per cent of them African-Americans in segregated facilities. A larger number of students, mainly from prosperous families, attended parochial or independent private schools. The progressive Brooklyn Collegiate Institute for Young Ladies drew Frances Trollope's attention with its rigorous curriculum embracing Latin, English composition, mathematics, history, geography, rhetoric, natural philosophy, and vocal music, among other subjects. Many poor and immigrant children, though, received no schooling, which in any case usually terminated about age fourteen; "Boss" Tweed himself left school at age eleven in 1834 to learn chair making.

Religion, a profoundly divisive as well as uplifting force, affected the city's economy and politics no less than its spiritual life. In the 1830s New Yorkers worshipped in more than 150 churches of many denominations, the number continually rising as established congregations divided and new ones took hold. St. Nicholas Kirche, the city's first German Catholic edifice, was consecrated in 1833, followed the next year by the French Protestant Église du Saint Esprit and a new synagogue building for Shearith Israel, North America's oldest Jewish congregation. In addition to employing many craftsmen and unskilled laborers, church construction benefited architects, bell hangers, church musicians, merchants, organ builders, religious book publishers, and of course clergymen, thus strengthening New York's economy as a whole. However, while religious affiliation influenced voters and fostered valuable social and business connections, some congregations bore heavy debt loads and became insolvent, abandoning their churches.

In 1835, the American Tract Society, a major publisher, roused the ire of religious conservatives when it fielded as many as a thousand New Yorkers to distribute evangelical literature. Righteous labor leaders cast their conflict with laissez-faire capitalists in terms of godliness versus irreligion; one union proponent, quoted anonymously in the *National Trades' Union* (21 November 1835), declared,

It has been contended [by those hostile to unions] that all that should be done in relation to the interests to men is negative. It is said, that if you "let men alone, things will regulate themselves." This false principle . . . . is atheistical, and we might as well say that the atoms of which the earth is formed, came together themselves and required no higher power, as to say that good regulations can exist amidst the opposing elements of self-interest, without the necessary institution to effect the good of the deserving.

In other words, as out of chaos God organized the elements, so workers' associations would regulate chaotic labor relations. Put another way, unions, or "combinations," were established to liberate the oppressed from bondage; the writer continues,

Before there was any society of this kind, capitalists had all the power of dictating prices in their own hands. And haughtily indeed, did they exercise their power. "Work at any price or starve," was their command. And so far did they carry their power, that in many trades, especially those conducted on by helpless women, that their utmost efforts, early and late, were not sufficient to procure even the ordinary necessaries of life. Many were driven to crime to prevent starvation. All-grasping avarice produced these results.

An oversupply of workers contributed to the problem of low wages. The city's population swelled from 123,706 in 1820 to 269,873 in 1835; these census figures are contestable but the rate of increase was staggering, and the surge fueled massive property development. In 1834 alone, 883 new buildings arose, 658 of them dwellings,

mostly two stories high but two of them having five stories; about 200 commercial buildings also went up, ten of them six stories tall. The surrounding counties, each larger than Manhattan, held far fewer inhabitants—when suburban Brooklyn (Kings County) gained a city charter in 1834 its population numbered fewer than 16,000—but their numbers grew apace. Immigration, largely of young, unskilled Irish Catholics (about 30,000 Irish arrived in 1835) but also of better-educated English and European tradesmen and entrepreneurs with families, accounted for most of this increase. "Melting-pot" images abounded: One Chinese man took the name William Brown upon marrying an Irish woman and becoming a permanent resident.

A wave of Scottish craftsmen arrived after England lifted its ban on their emigration in 1825; among them in 1834 was the weaver William Sloane, founder of W. & J. Sloane's home furnishings company, which flourished until the late twentieth century. Having come to New York more than forty years earlier, the Scottish furniture maker Duncan Phyfe built a huge business employing up to 100 journeymen; John Geib Jr., scion of an important German piano making and music publishing family, apparently worked for Phyfe about 1815. The French upholsterer and cabinet maker Alexander Roux, another sophisticated artisan attracted by the city's booming market, arrived in 1835; his company prospered by catering to the current fashion for French furniture styles. (According to Spillane, Roux's premises on Broadway later housed the piano manufacturers William Linden and John Fritz, the latter still a cabinet maker in 1835). To prepare prospective German immigrants for America's unfamiliar ways, in 1833 the German Society of New-York under Philip Hone's presidency published a booklet of advice, Wohlgemeinter Rath der Vorsteher der Deutschen Gesellschaft in New-York, that warned of pitfalls for the unwary (see Appendix II).

While the city's African-American population held steady in numbers, it declined in proportion from about ten per cent in 1820 to about six per cent in 1835. The last slaves owned in the region gained emancipation in 1827, although until 1841 nonresidents could keep slaves in New York for up to nine months. Persons identified as "colored" in Longworth's 1835 directory included numerous independent tradesmen and a few property owners who had voting rights. The freeborn William Downing's oyster house at Wall and Broad streets was among the city's leading eating establishments by 1830. African-American cultural and educational organizations, including the Phoenix Society for young men (founded 1833), the Female Literary Society (1834), and the Garrison Literary Association for young persons (1834), deserve recognition but little record of their achievements survives.

Social and religious reformers from New York dominated the American Anti-Slavery Society, founded in 1833 by abolitionists including the prominent silk jobbers Arthur and Lewis Tappan. Despite their efforts, anti-emancipation sentiment festered. The Tappans' formation of the Female Anti-Slavery Society fueled resentment that led to murderous race riots in July 1834, when opponents wrecked Lewis Tappan's home and destroyed the organ in Rev. Henry Ludlow's Presbyterian church on Spring Street. In 1835, when the New-York Vigilance Committee under David Ruggles's leadership began assisting fugitive southern slaves, a mob ransacked Ruggles's abolitionist bookshop at 67 Lispenard Street, across the street from the music teacher Piero Maroncelli. Bigotry also sparked anti-Catholic violence—Irish gangs responded in kind—and led to formation of Protestant nativist political organizations, notably the Native American Democratic Association. The Association's mayoral candidate in 1836, the painter and inventor Samuel F.B. Morse, then president of the National Academy of Design and Professor of the Literature of the Arts of Design at the University of the City of New York, was soundly defeated.

Fears that free blacks and immigrants would undermine American institutions proved unfounded, but already in 1831 (when Nat Turner led a bloody uprising of slaves in Virginia) a General Convention of the Friends of Domestic Industry had expressed concern about a brewing interethnic labor crisis. During the mid-1830s average real wages plunged as brutal inflation squeezed not only the unemployed but also manufacturing and craft workers, who made up the largest sector of New York's male wage earners. The *New York Transcript* reported (3 April 1835) that living expenses, estimated minimally at \$650 for an average family, were rising at an intolerable rate of ten to twelve per cent annually. As wages lagged behind prices, earners struggled, often angrily, to supplement meager incomes even as working-class population growth weakened their bargaining position.

Contractors' use of cheap convict labor especially galled honest artisans. During 1835, for example, forty-one inmates of upstate Auburn Prison produced tools at about half the normal wage, according to Kenneth and Jane Roberts. Also annoying was the prevalence, despite stiff tariffs, of imported goods; on 29 April 1835, journeymen and apprentice cabinet makers vandalized French furniture being auctioned at the City Hotel. Sympathy for disgruntled workers galvanized the social activist Horace Greeley, who in 1834 at age twenty-three began his career as a New York newspaper editor.

Widening disparities in income and living conditions separated New York's rich and poor; by 1830, four per cent of the city's populace held half its private wealth. Assessed value of personal and real property—very little of it in the hands of wage earners—nearly doubled between 1833 and 1836, reflecting Manhattan's position as the nation's fastest growing market. The municipal budget, which exploded from \$676,618 in 1830 to \$1,516,638 in 1834, was one measure of consumer-driven prosperity; another was real estate valuation, which reached \$143 million in 1835. A further manifestation of the city's wealth, and of dissatisfaction with such lagging infrastructure as inadequate public wells, was voters' approval in 1835 of the Croton Waterworks construction, a huge water supply project that cost \$11.5 million over eight years. This enormous expense, which outraged tenants and workers opposed to extra taxation, was justified because rational urban development demanded ample piped water for human and animal consumption, manufacturing, sanitation, and fire fighting. Already in 1828 cast-iron water mains began replacing old wooden pipes, which still turn up in excavations.

In 1830 officials banned burials south of Canal Street to reduce water pollution and disease. Yellow fever, an almost yearly scourge until 1821, was then in abeyance, but tuberculosis and pneumonia, which together claimed more than 1,600 lives annually from 1830 to 1834, and cholera, a new killer that claimed 3,513 lives in 1832 alone, spurred efforts to safeguard public health. Nevertheless, "hog riots" broke out when authorities tried to confiscate roaming pigs that fed off garbage in the streets. Mounting disorder stoked by suffering led the city government to establish a Department of Charities and Corrections in 1832; three years later, prison officials thoughtfully removed executions from public view. Remarkably, only seven premeditated murders were reported in 1835.

The city's first notorious tenements arose on the Lower East Side in 1833, and as squalid neighborhoods continued to deteriorate through overcrowding, illness and mortality climbed alarmingly, by about fifty per cent between 1833 and 1834. The resulting exodus of frightened New Yorkers caused a short-term economic slump resulting in thousands of lost jobs. Overtaxed asylums, hospitals, and orphanages could hardly cope. The New York Homoeopathic Society, founded in 1835, responded ineffectually to the rising death rate. Phrenology, also introduced to New York about 1835, promised to promote mental health by analyzing character, but this lucrative pseudo-science likewise made no headway against crime and disease. The vegetarian crusader Rev. Sylvester Graham, famous for Graham flour, encouraged wellness through sensible diet, a cause lost upon families scrounging for scraps. The United States' Vaccine Institution for the Extermination of the Small Pox practically excluded destitute New Yorkers by charging \$1 for a vaccination administered at its office and \$2 if given at the patient's dwelling.

The urgent need for better fire protection was brought home by the Great Fire of 16-17 December 1835, which destroyed 674 commercial buildings, warehouses, and piers in a twenty-square-block area south of Wall Street and east of Broad Street. This crippling disaster, recorded in a series of dramatic paintings by the Neapolitan immigrant Nicolino Calyo (in The New-York Historical Society), bankrupted twenty-three of twenty-six local fire insurers and left many workers unemployed.

Earlier, on 3 January 1835, fire consumed Henry Erben's pipe organ manufactory. According to the *New York Commercial Advertiser* (5 January), Erben's Centre Street operation "was entirely destroyed with its valuable contents, consisting of a large stock of material for his business, several partly finished organs, and three valuable ones, either entirely or nearly completed, for the Moravian church in Fulton street in this city, and for churches in Roxbury, Ma. and Montgomery, Alabama . . . . Two workshops behind Mr. Erben's factory, occupied by John Moore, brass founder, also fell in the conflagration . . . . Mr. Erben, was, we are informed, insured to the amount of \$14,000, which nearly covers his loss." This report, although contradicted in some

details by the same day's *New York Sun*, discloses the considerable investment Erben had at risk; he resumed work using seasoned lumber provided by Nunns Clark & Co. and Duncan Phyfe (*Evening Post*, 10 March 1835). Later that year, when fire damaged Cornelius Godfrey's small piano manufactory, Godfrey carried \$1,000 of insurance (*National Trades' Union*, 25 July 1835), the cost of which must have added significantly to his overhead.

In the wake of the catastrophic Great Fire, new businesses crowded Lower Manhattan even as upscale commerce and housing thrust northward. Perversely, while the city limits expanded, the number of fire fighters—mostly lower-class and journeymen volunteers who from time to time included the piano makers Isaac Kenard, Samuel Nielson, Charles Seabury, Jacob Smith, Joseph Snyder, Charles Taylor, Isaac Van Horn, and Richard Wentworth—declined from about 1,500 in 1835 to 1,300 in 1840. Brawls among highly politicized, rival fire companies and between firemen and vexed civilians reflected the city's economic, ethnic, and political rifts.

Formation of the Whig Party, generally supported by nativists and privileged capitalists (the "mushroom aristocracy"), provoked violent protests in 1834. But the chief opposition, Tammany Hall, ostensibly a progressive Democratic organization that supported immigrants, laborers, and craftsmen, became scandalously involved in corruption surrounding efforts to reform the fractured fire department. Cleavage occurred even within Tammany Hall in 1835, when the Equal Rights Party, or "Locofocos," a dissident egalitarian faction, split from the regular Democratic core headed by the city's first directly elected mayor, Cornelius Van Wyck Lawrence (served 1834-37). The stew of urban politics attracted many power-hungry characters, not the least contentious being Henry Erben, who became alderman of the slum-ridden Sixth Ward in 1836.

When the 1836 Presidential election called out voters after a campaign inflamed by local controversies, Tammany Hall's favorite, Martin Van Buren, won with 17,469 votes to 16,348 for the Whigs' William H. Harrison, a fairly small margin. Such hard-fought political battles in America's most diverse city fed upon societal inequities clamorously debated in scores of periodicals of every stripe, ranging from the literary Knickerbocker Magazine (founded 1833) and Ladies' Companion (1834) to some thirty-five mostly ephemeral penny newspapers. One of these, Benjamin Day's New York Sun (1833), in two years achieved the largest circulation in the world. Partisan papers with such evocative names as Mercantile Advertiser and New-York Advocate (1833), Adopted Citizen (1834), American Whig (1834), Constitution (1834), Democratic Chronicle (1834), Jeffersonian (1834), Man (1834), New Yorker Staats-Zeitung (1834, representing German-speaking Democrats), New-York Mechanic (1834), Union (1834, voice of the newly formed General Trades' Union), and Business Reporter and Merchants' and Mechanics' Advertiser (1835) offered no pretense of editorial objectivity. Their often overheated rhetoric fanned street violence ignited by wage cuts, job losses, and general anxiety among vulnerable workers.

### WORK AND PLAY

THE LABOR CRISIS INTENSIFIED AS LOW-PAID, OFTEN ILL-TRAINED IMMIGRANTS AND out-workers, including women and children, undercut proud American-born journeymen. New labor-saving devices posed another threat; for example, about sixty stationary steam engines operated in Manhattan in 1834 (unlike New England's streamside manufacturing towns, New York City never relied much on water power). Another harbinger of labor unrest was New Yorker Walter Hunt's invention in 1834 of a precursor to the sewing machine. As republican sentiment further eroded relations between journeymen and employers, emboldened craft workers, commonly called "mechanics," flexed minds as well as muscles to strengthen their position and consolidate a group identity. The Hall of Science, a workers' institute founded by the outspoken radical Frances Wright, operated in an abandoned church near the Bowery between 1829 and 1831; as well as running a children's day school and a bookstore, the institute offered free lectures for adults on mathematics, science, and other practical subjects. The General Society of Mechanics and Tradesmen, organized in 1785 to protect craftsmen's interests, began free lecture courses in 1833, maintained a library for apprentices, and gave credit through its bank.

Masters and manufacturers, whose ranks overlapped with the mechanics', promoted similar objectives through education and public programs. Well-attended trade fairs had been mounted locally since 1828 by the American Institute of the City of New-York, founded the previous year to foster American arts and manufactures. The Mechanics' Institute of the City of New-York, whose organizers in 1830 included the piano manufacturer Henry O. Kearsing, began holding juried fairs in 1835 at Castle Garden, a popular entertainment venue. Musical instruments formed one of the smaller categories represented at these fairs, but their exhibitors prized the awards and publicity their products won, and everyone enjoyed inspecting the latest products.

A few instrument makers engaged visibly in party politics, but without much impact except for the irascible Henry Erben, whose clout was considerable. Nine piano makers, most prominently William H. Ball and Henry S. Meeks, participated in the reformist New York Working Men's Party, a short-lived protest group led by Thomas Skidmore, the utopian socialist author of *The Rights of Man to Property!* (1829; inspired by Tom Paine's *The Rights of Man*). Only three of these "Workies" remained active when the party disintegrated in 1831, and just one piano maker became a Locofoco, according to Walter Hugins.

Politics aside, hundreds of journeymen of all trades were swept up in New York's seething labor movement, which perhaps drew some inspiration from abolitionist rhetoric. Following a bitter strike by carpenters in spring 1833 to enforce their demand for a daily wage of \$1.50 (a 12<sup>1</sup>/<sub>2</sub>-cent raise), nine local labor societies constituted the General Trades' Union, a dynamic confederation through which labor briefly asserted its autonomy after the demise of the Working Men's Party. Ely Moore, the Union's

first president, articulated its principles in a stirring address on 2 December 1833; he identified workers' interests with the Republic's and excoriated greedy capitalists and exploitative banks. Moore's widely disseminated text set the high-minded, self-righteous tone echoed in many subsequent resolutions and in the preface to the piano makers' Price Book. Shortly the General Trades' Union represented about forty groups, while several other societies including the journeymen piano makers' (organized in 1835 according to the *National Trades' Union*, 28 November 1835) functioned independently. In 1836 the number of New York labor societies swelled to fifty-two, embracing about 5,000 members, potentially a small army.

Labor militancy, traditionally voiced at jubilant Independence Day celebrations, increasingly found expression through strikes aimed at improving wages or reducing hours: two strikes in 1833, six in 1834, twelve in 1835, and at least seventeen in 1836. The months from March through June 1835 were especially turbulent. On 25 March the General Trades' Union sanctioned a strike by journeymen cabinet makers in support of their new price book. In April, weavers' employers agreed to a ten per cent raise. In mid-May, sheet iron and tin plate workers associated to regulate wages, and later in May journeymen ladies' cordwainers and female shoe binders advanced new price books. Similar efforts, mirrored in nearby towns, received encouragement in June by news from Philadelphia of strikes demanding a ten-hour working day. (Already in 1827 Philadelphia's journeymen carpenters struck for a ten-hour rather than sunrise-to-sunset work day, an action said to have initiated the American labor movement.)

New York's journeymen cabinet makers, meeting on 31 March 1835, adopted the following typical preamble and resolutions, published in *The Man* (2 April 1835; typo-graphical errors have been corrected):

Whereas, The favorable aspect of affairs, inspires us with confidence that our object will ultimately be obtained, and believing that success entirely depends on the manner in which our actions are regulated, we deem it expedient that we maintain by every honorable means in our power, the position we have taken to obtain our scale of prices, and believing as we do, that the employer as well as the Journeyman, will be benefited by a regular and efficient standard, calculated from perspicuity and equity to be properly adapted to the present style of work, and to preclude the necessity of giving work out of the shop, so injurious to ourselves and families, inasmuch as it tends to the formation of a system, which will ultimately (if not promptly met) lead to the annihilation of our rights, and cause us finally to become mere vassals of the wealthy employer;

Therefore, be it Resolved, That our former resolution to sustain by every fair and honorable means, the position taken by the Society of Journeymen Cabinet Makers, shall be strictly adhered to.

Resolved, That we respond to the resolution of the Society relative to publishing the names of those employers, who believing in the justice of our cause, feel disposed to comply with our demands.

Resolved, That we will extend the right hand of fellowship to our German fellow citizens, who work at our business, and we will use every means in our power, to prevent them from being imposed on, as they have been heretofore.

On 23 May, The Man carried the following public notice:

We the Journeymen Ladies Cordwainers of the City of New York, feeling the comparative situation of poverty and indigence [in] which we have been placed for a length of time, and knowing the inadequacy of our wages to support ourselves and families, and also knowing that if we cannot support ourselves we must be supported—for if the wages of a mechanic is not sufficient to support himself and family, his support he must have, and if he cannot pay his expenses, the public must be the sufferers, it is therefore highly necessary that he should have a sufficient compensation for his labor. We have therefore found it highly necessary to advance our wages, and hope the public will see the motives which actuate us. It is well known that the monstrous raise of rents and provisions make it impossible for any one of us to support our families at the old list of prices, therefore be it

Resolved, That we hail with pleasure the new list of prices, as it is drawing nearer to a fair compensation for labor.

Resolved, That we are happy to hear that three-fourths of the employers heard from are in favor of us and we are determined not to give up until we obtain the full list, the whole list, and nothing but the list.

Resolved, That the above preamble and resolutions be signed by the officers and published . . . .

Piano makers left no such record of their deliberations, but no doubt they expressed their concerns similarly because they shared similar goals and were intimately involved with related combinations. For instance, the same three delegates represented both piano makers and cabinet makers at a General Convention of the Trades of Boston (*The Man*, 12 March 1834). In connection with the New York cabinet makers' effort, the General Trades' Union thanked piano makers "for their assistance in procuring the list of prices" (*New York Transcript*, 27 April 1835). The piano makers, along with ship joiners, also "assisted [cabinet makers] to procure employment at their respective branches, and otherwise encouraged them in their *strike*" (*National Trades' Union*, 2 May 1835). When Asa Howard, a piano maker and member of the Society of Cabinet Makers, was appointed Grand Marshal of the parade marking the second anniversary of the General Trades' Union on 28 August 1835, the cabinet makers invited "members of the *Piano-forte-makers Society*, who are so inclined" to join the celebration (*National Trades' Union*, 15 August 1835). Piano makers further supported a tailors' strike against wage reductions in 1836. Perhaps hoping to enlist new members, on 9 March 1836 the General Trades' Union appointed a committee "to wait upon the societies of Piano Forte makers and Comb makers," but the journeymen piano makers never officially joined the larger union. No documentation appears to support Spillane's assertion that prior to organizing their own independent society the piano makers staged a walkout in 1834, but such an action would not have been surprising.

During all this labor ferment, stock market and real estate speculation continued unchecked and some capitalists grew nervous, yet few foresaw the coming credit crunch and panic of 1837, during which union efforts collapsed together with the economy. (Likewise in England, business prosperity drove trade unionism to an early peak about 1834 but a depression beginning in 1837 abruptly weakened labor organization.) To many prosperous New Yorkers in 1835 the future looked rosy, and they expressed their optimism through patronage of art. In April, for instance, the sculptor Robert Ball Hughes completed for the New York Merchants' Exchange a statue of the late Federalist statesman and Secretary of the Treasury Alexander Hamilton; the \$8,000 figure, said to be the first carved of marble in the United States, was destroyed in the Great Fire. Earlier, the American Academy of the Fine Arts proudly displayed American paintings and sculpture next to Old Masters in galleries opened in 1831. This exhibition was probably among those prompting Frances Trollope's sarcastic remark, "The Medici of the Republic must exert themselves a little more before these [exhibits] can become even respectable." Of course New York's "Medici" hardly included the artists themselves. When the painter John Trumbull stepped down as president of the American Academy in 1835, he resided in a boarding house at 256 Broadway, a few steps from Thomas Kearsing & Son's piano establishment.

The English painter Thomas Cole, who settled in the city in 1825 and helped form the progressive National Academy of Design, premised his "Essay on American Scenery," written in 1835, on the prevailing elite view of America as a land of infinite promise. Cole's painting *The Consummation of Empire* (1835-36, in The New-York Historical Society) envisioned an idealized Classical capital. Indeed, Grecian architecture and furnishings characterized fashionable public buildings and residences erected in the Empire City about this time. The nine Grecian mansions of La Grange Terrace, constructed on Lafayette Place by the Whig politician Seth Geer in 1833, housed such luminaries as John Jacob Astor, who had owned the buildings' site; ironically, the Terrace's stone façade was carved by prisoners at Sing Sing, the state penitentiary. Geer's colonnaded mansions cost buyers \$30,000 each; more typical upper-class, single-family brick dwellings reportedly cost about \$10,000 in 1832, still far beyond reach of most New Yorkers.

While life was hard for wage earners and for many small-time businessmen and professionals, energetic breadwinners could at least embark on almost any livelihood without legal hindrance. Men with initiative, or just desperate, commonly pursued

multiple careers, undertaking several related occupations at once or changing course every few years as economic winds shifted. William Albro and George Blount, for example, who were identified as piano makers in Longworth's 1835 directory, appear respectively as a carpenter and cabinet maker in 1834. The organ builder John H. Enstein had likewise been a cabinet maker, and the musical instrument makers George Hawes and Warren Hoffman had previously been a tuner and a musician, respectively. Among other multitalented musicians, Peter F. Gentil, identified as a professor of music by Longworth in 1835, also worked as a conductor, string player, singer, and dance teacher. A fellow music professor, Charles Edward Horn, appeared as an actor, singer, pianist, composer, and conductor. Reuben J. Munson Jr., first named as a grocer in 1826, played the horn professionally and was also an active organist, pianist, singer, and music teacher. Henry Christian Timm, who immigrated from Germany in 1835, established himself as a first-rate pianist, organist, hornist, trombonist, teacher, and conductor. The music teacher Edward Fehrman also taught German. Like Edward Riley Sr., many musicians and instrument manufacturers engaged at least briefly in sheet music publishing and retailing.

No career was more impressively varied than that of John Jacob Astor (1763-1848), by 1835 one of the nation's most celebrated inhabitants. A German-born son of a butcher and schooled only until age thirteen, Astor followed an older brother to Manhattan in 1784, intending to represent another brother's retail music and instrument company headquartered in London. Astor married in 1785, and putting his wife in charge of his music shop (sold to John and Michael Paff in 1802), he then concentrated on fur trading and began purchasing land. In 1834 he sold his fur business in order to expand the real estate holdings that made him America's reputedly richest man. Along the way he became president of the German Society of the City of New-York, succeeding Jacob Lorillard in 1837. Music remained integral to Astor's opulent way of life; among other things, with John K. Beekman he co-owned the Park Theatre, a favorite elite opera and concert hall. There in 1825, Astor joined his friend Washington Irving, the popular author and an avid amateur flutist, in supporting a production of Rossini's *The Barber of Seville*.

Not remotely in Astor's class were such hopeful German immigrants as the violin maker Heinrich (Henry) Schatz, the music dealer and importer Charles Bruno, and their sometime partner Christian Frederick Martin. Martin, a guitar maker fed up with restrictive working conditions in Saxony, arrived in 1833 and opened a music shop where he employed and boarded the guitar and violin maker Louis Schmidt, who first appears independently in city directories in 1836. Among other local German instrument makers and importers, Martin did business with Charles G. Christman, Charles F. Hoyer, William Rönnberg, and Richard Schroeder. In 1839 Martin sold out to another German outfit, (Edward) Ludecus & (John Frederick) Wolter, and moved to Nazareth, Pennsylvania, where the guitar company he founded still thrives. United by language, culture, and business interests, such men formed personal rela-

tionships, observed each other's work, and doubtless shared ideas they hoped would improve their competitive positions vis-à-vis other local networks.

Longworth's 1835 directory discloses some of these connections through address listings. For example, a number of music merchants shared premises on Broadway. Two doors north of the City Hotel, 137 Broadway housed both James L. Hewitt & Co.'s music store and the piano manufacturers John Clark and his partners Robert and William Nunns. Up the street at 201 Broadway, Joseph Atwill's music store shared space with William Geib and a brilliant piano maker from Boston, John Osborne, who died in a fall at his manufactory on 27 May 1835. The piano maker Albert G. Smith gave his address as 385 Broadway, the same location as Jollie & Millet's music store and, several years later, as the Spaniard John Coupa's guitar studio (Coupa became another partner of C.F. Martin). Charles F. Hoyer's music store (Hoyer also served as consul for Baden) at 393 Broadway adjoined that of Monson Bancroft at 395, an address shared by the piano maker Michael Cregier. Otto Torp's music store at 465 Broadway also served the piano manufacturers Bridgland & Jardine. Interspersed along Broadway, proceeding northward, were shops or dwellings of Thomas Kearsing, Lorenzo Da Ponte, George Endicott, Anselmo Berti, Cyprian Gorrin, Gaspar Godone, William Coard, James Neil, Samuel Neilson, and probably others in the music field not listed by Longworth, as well as the residence of the diarist and onetime mayor Philip Hone at number 235.

Like shops and showrooms, living quarters were often shared, especially by unmarried craftsmen. The piano makers William Albro, Cephas Gorton, and Achilee (or Achille?) Hammond lived at 172 Spring Street, perhaps a boarding house. Piano maker James Dent shared the address 114 Orange Street with the cabinet maker Thomas Raven (probably related to the piano maker Richard Raven), while instrument maker Michael Dowling lived and perhaps worked at the rear of 114 Orange together with organ builder Henry Leaman. Piano maker Robert Wood was nearby at 112 Orange, and organ builder James Heath occupied the rear of 117<sup>1</sup>/<sub>2</sub> Orange. The music retailers William H. Dubois and George Bacon lived practically side by side at 13 and 17 Crosby respectively, while piano maker Thomas Gibson at 60 and 61 Barclay (an address formerly shared with his partner Morgan Davis) was a neighbor to tuner Theodore Marschhausen at 621/2 Barclay and to the musicians Andreas Berger and Francis Schmelger, both at 59 Barclay, rear. James Dwyer and Edward Hearne, piano journeymen employed by Geib & Walker, both lived on Thirteenth Street near Fifth Avenue. At least a dozen other persons with music-related occupations resided along Broome, Crosby, Pearl, and Spring streets within a few minutes' walk of one another, but because tenants commonly changed domicile every year or two (May-day was the traditional moving day) it is hard to keep track of their addresses.

Business connections were commonly reinforced by family ties or membership in fraternal organizations; notably, in 1835 Charles Christman became secretary of the German Union Masonic Lodge 322. Established networks constantly re-formed and

drew newcomers into their orbits. For example, William Dubois, a native of the West Indies and successor to the Paffs' music store, brought Adam Stodart into partnership in 1822; Stodart, related to the English piano maker Robert Stodart, might previously have been Dubois's agent in Richmond, Virginia. Some pianos sold under the Dubois & Stodart label were built for them by the brothers Robert and William Nunns, who in 1822 had worked for Kearsing & Sons. After Dubois & Stodart dissolved in 1834, Stodart briefly joined the lithographer Nathaniel Currier to print sheet music, but he returned to piano manufacture in 1836 in partnership with Horatio E. Worcester, from Albany, and John B. Dunham, who had made piano cases for the Nunns firm. Stodart, Worcester & Dunham reportedly occupied the late John Osborne's factory building. Dubois in turn backed his neighbor, the sometime music publisher George Bacon, who had come from Philadelphia; piano maker Thomas H. Chambers joined Dubois & Bacon in 1836, and other realignments followed.

All this enterprise flourished because musical entertainment and desire for spiritual nourishment progressed hand in hand with the growing population's social aspirations. Every level of society recognized music's civilizing power and role in signifying status. In an unsigned editorial "On the evidences of musical taste," New York's *American Musical Journal* (I October 1834) noted that,

To an attentive observer of musical events in our city, there are many circumstances indicative of the existence of a very general taste for music amongst our people.... Music is cultivated privately to a great extent; almost all parents consider it a necessary accomplishment for their children; every house of respectability has its piano, guitar or harp, and music is the chief source of amusement at our social meetings. The amateurs of the violin, flute and other instruments are numerous, and many of them have attained considerable proficiency.

But the increase of professional men; of new musical publications, of the manufacture of musical instruments, particularly of the piano forte, and the rapid extension of every branch connected with music are all evidences of the extent of its cultivation, and proofs of the strong passion entertained for it by our countrymen.

Like other high-toned periodicals, the weekly *New-York Mirror*, a "repository of polite literature and the fine arts," regularly published instrumental arrangements of popular music meant for domestic performance. Elegant house parties often included music-making, although Frances Trollope opined, "from their having very little professional aid at their parties, [this music] is seldom, I believe, as good as what is heard at private concerts in London."

Amateur performers, if not taught by a relative or friend, took lessons from private teachers or at music academies, notably the New York Conservatorio, opened in 1836 by the composer Elam Ives Jr. Female pupils mostly learned guitar, piano, or harp if their husband or father could afford one. Henry J. Trust, the only harpist named in Longworth's 1835 directory, probably taught wealthy women almost exclusively, as no doubt did Ann Cowan, who in the 1834 directory called herself a "Teacher of

the Piano on the LOGERIAN system, harp, guitar, and Singing." Male amateurs normally displayed their musical prowess with wind instruments. All-brass bands, promoted by New York's eminent Dodworth family ensemble, were just coming into vogue about 1835, when Charles Christman, one of America's first music merchants regularly to sell brass instruments, won a silver medal for trumpets and post horns he exhibited along with flutes and clarinets at the American Institute of the City of New-York fair.

Of course men and women sang for fun and in church. Voice teachers of both sexes, among them Albina Stella ("White Star") and Abraham Taylor, benefited from the adulation surrounding star singers of the day, such as Charles E. Horn and Niccolò Paganini's attractive young friend Charlotte Watson. Piano teachers profited similarly from the acclaim greeting such celebrated soloists as the Englishman William A. King, regarded by the critic of the *Mirror* (19 July 1834) as the "first *male* pianist now in this country." King also distinguished himself as organist of Grace Church and as a composer of works published by Firth Hall & Pond. The violin teacher Daniel Lane, perhaps the same Daniel Lane identified by Longworth as a hairdresser at 128 Franklin Street, exemplifies the many obscure instructors who advertised in the penny press. William H. Astor, another music teacher, might have been a son of John Jacob Astor's older brother Henry.

Professional concerts at pleasure gardens such as Castle Garden, Niblo's (seating 3,000), and Vauxhall and at theaters such as the National and the Bowery, lasted for hours and embraced everything from virtuosic instrumental solos to blackface "Ethiopian operas" like Thomas Dartmouth ("Jim Crow") Rice's 1835 hit, *Bone Squash Dia-volo*. Performance quality varied, but the repertoire's scope was impressive. Beethoven's *Egmont* overture received its New York premiere at the City Hotel on 2 April 1835, not long after a program at the Park Theatre—"the only one licensed by fashion," according to Frances Trollope—that featured a serpent concerto. On 15 April 1835 at Thomas Hamblin's Bowery Theatre, the celebrated French ballerina MIle. Céleste introduced Filippo Taglioni's *La Sylphide* to New York; during that year, Céleste allegedly earned up to \$10,000 per month, an incredible amount. The Bowery's popular shows and reasonable, uniform ticket prices attracted a largely working- and middle-class audience to a theater Trollope admired as "perfect as to size and proportion, elegantly decorated, and the scenery and machinery equal to any in London."

Amateur singers cultivated sacred choral music outside churches as well as within. The New-York Sacred Music Society presented Handel's *Messiah* in Mozart's version in 1831 and Haydn's oratorio *The Creation* in 1833 and thereafter. Another mostly amateur choral society, the New-York Academy of Sacred Music, formed in 1835 by Thomas Hastings (editor of *The Musical Magazine*), engaged Sylvanus B. Pond as its director. Organizations such as these as well as purely instrumental ensembles involved hundreds of amateur musicians (the Sacred Music Society alone involved some 200 members in 1835) alongside a lesser number of professionals, whose participation was

not yet restricted by union rules. Critics reviewed amateur as well as professional performances in the short-lived *American Musical Journal* (published by James Dunn in 1834 and 1835) and other periodicals devoted to cultivating New Yorkers' taste.

Although an anonymous writer in the *New-York Mirror* of 3 January 1835 extolled "the progression and improvement of the delightful art of music within the last ten years," two Italian opera companies promoted by Mozart's former librettist Lorenzo Da Ponte (resident in New York from 1805 until his death in 1838; grocer, book dealer, and from 1825 professor of Italian at Columbia College) failed dismally despite such grand offerings as Rossini's *Mosè in Egitto* (concert version in 1832, fully staged in 1835) and parts of *Semiramide* (concert version, 1835). Perceived by many Americans as snobbish, foreign-language opera presented by foreign artists faced tough resistance. Yet the virtuosity of trumpeter Alessandro Gambati in the March from *Mosè in Egitto* roused "so great a rage among New York's feminine practitioners of the parlor piano that a bedevilled journalist was driven to plead with 'our young ladies' to find some other craze and 'leave the "March" in *Mosè* alone for some short time—an event devoutly to be prayed for by any man who has the misfortune to live in the neighborhood of a Piano Forte in New-York'" (Vera Lawrence, quoting the *American Musical Journal*, April 1835).

A comprehensive list of New Yorkers who earned income directly or indirectly from music cannot be compiled from a single source. Longworth's 1835 directory (which lists fewer than 38,000 persons, mostly heads of households, or about fourteen per cent of the city's inhabitants) names only three women professionally involved with music, but many women as well as men gave lessons or performed for pay. The directory identifies only two organists but the city's churches employed many more, if only part-time; important among them was Henry Erben's father, Peter, organist of Trinity Church and also a composer, piano manufacturer, and occasional music publisher. (Henry's brother, Peter Erben Jr., ran a flour store in 1835.) Concert and theater programs, business ledgers (notably C.F. Martin's), and newspapers refer to many local musicians who are otherwise almost undocumented.

Scores of other New Yorkers earned something from music retail businesses and related services. In addition to specialized music stores such as Atwill's Music Saloon and Pianoforte Warehouse, book shops and "fancy goods" emporiums like Monson Bancroft's also commonly purveyed music merchandise. Among others, the stationer Ichabod Hoit offered a variety of music papers, while the "fancy cabinet maker" Thomas B. Rogers advertised musical instrument cases, and Henry Hart's fancy goods store sold accordions and baby whistles. In 1828 the carpet retailers Albro & Hoyt advertised piano covers, a common accessory; perhaps this Albro was related to William Albro, listed as a carpenter in 1834 and as a piano maker in 1835. Only four piano tuners and one "professor [of] tuning" appear in Longworth's 1835 directory, but there must have been more. Many copyists, engravers, lithographers, printers, and binders who prepared sheet music for sale are listed along with composers and music teachers in Sidney and Elizabeth Huttner's comprehensive *Register of Artists*. To various degrees depending on the product, instrument makers relied on lumber and ivory merchants, sawyers, tanners, varnishers and stencilers, hardware and glue wholesalers, among others who benefited indirectly from the city's music trade. The aggregate cash flow from all areas of music commerce cannot be calculated but was considerable.

Incomplete though it is, Longworth's directory identifies about 260 persons having music-related occupations in 1835 (see Appendix I); uncertainties regarding the work of such persons as Louis Vultee, a prompter related to a professor of music, render their number approximate. The previous year's directory names still others, including the musicians Henry Andrea, Thomas Ryves, and James Jackson (perhaps the son of a piano and organ maker of the same name), the piano makers William Abbott (probably related to John Abbott, listed in 1835) and John C. Malthaner, and musical instrument makers Luke Schroeder and Edward Schwachhofer. Since directory listings are often intermittent, some of these individuals doubtless carried on work in 1835 and later. Longworth cites William F. Senior as a piano maker in 1831 and 1840, but during the intervening years Senior is either not listed or appears, perhaps erroneously, as an accountant in 1833-34. The piano maker Thomas Shaff appears in 1834 and 1836 directories but not in 1835. Likewise, Luther Whiting and Francis Wilkie, identified as piano makers since the 1820s, drop out of city directories in the mid-1830s but later reemerge. John C. Malthaner opened a piano manufactory in Bethlehem, Pennsylvania, in 1837. Incidentally, New Yorkers named Schuchardt and Schudy, though apparently not connected with music, might have been related to earlier instrument makers with the same surnames in England.

Of these roughly 260 persons, about one-third called themselves piano makers. These men considerably outnumbered music teachers or professors (fifty-eight), musicians (forty-eight), and other instrument makers and tuners (thirty-nine), and constituted about seventy per cent of the group comprising all musical instrument makers and tuners. (Longworth usually distinguished musical instrument makers from makers of surgical, mathematical, and philosophical instruments.) Obviously, constructing a piano involved more workers than did fashioning, say, a flute or guitar, but why the piano makers and a much smaller number of organ builders chose to differentiate themselves from instrument makers in general is unclear. The distinction might have expressed higher professional status, since pianos and organs were mechanically more complicated than orchestral and band instruments and required more advanced manufacturing methods. Also, because of their visibility and cost, keyboard instruments themselves signified high status, hence the Price Book's considerable attention to their appearance. Traditionally, keyboard instrument builders, like clock and engine makers and other mechanics, signed their products prominently, even ostentatiously, while trademarks on smaller, less mechanized instruments, as on furniture, tended to be innocuous.

Most so-called piano makers were probably journeymen employed by a handful of shop owners, some of whom, like William Dubois, were entrepreneurs rather than

master craftsmen. More than a few of these men, both employers and employees, were born or married into musical families. For example, Jasper and Joshua Thurston were apparently related to the New York music publisher Nathaniel Thurston. Alexander and James Pirsson were probably sons of William Pirsson, New York's foremost music engraver before Edward Riley (by 1835 Alexander was primarily an organist and teacher and James a piano tuner; James later played double bass with the New York Philharmonic and won awards for his innovative pianos). The four Geib brothers, John Jr., Adam, George, and William, descended from a line of German organ builders; their father, who had patented a novel piano mechanism in England, brought them to New York from London in 1797, and by 1835 the family had achieved prominence in local music circles. Daniel Walker, a cellist, music merchant, and piano manufacturer who patented a tuning pin in 1838, became Adam Geib's son-in-law. Adam's son William Howe Geib might have been named for the organ builder, music dealer, and publisher William Howe, who came from London to New York in 1796 and was presumably a friend of John Geib Sr.'s.

In addition to the piano makers already mentioned, others active about 1835 but not identified as such in that year's directory included Geib & Walker's journeymen and labor activists Thomas Bronner, John P. Corbusier, Asa Howard, F. Robbins, and Thomas Shaff, as well as Daniel T. Staniford (later a mahogany merchant), Jacob Stealy, and Eliphalet Stratton from upstate Wayne County (later a hardware dealer). Isaac Innes, a piano maker listed in New York directories only from 1850 to 1856, might still have been an apprentice in 1836 when he signed his copy of the piano makers' Price Book. Including anonymous apprentices and itinerant journeymen, the total number of New York City men and boys directly engaged in making pianos in the mid-1830s could have exceeded 150—a low number compared to, say, shoe makers or tailors, but not a negligible labor force.

According to Longworth's 1835 listings, organ building occupied only twelve men, some of them affiliated with Henry Erben's shop—but again, unnamed apprentices and journeymen would have swelled this number. One promising New York organ builder overlooked by Longworth that year was seventeen-year-old Richard M. Ferris, then working for Erben in the South. Another was Samuel Jackson, listed without occupation at 73 Hamersley, an address he shared with the piano maker Henry Lewis. Samuel's father and eventual partner, James, located at 75 and 77 Hamersley in 1834, later also worked for Erben, while James Jackson Jr. became a partner of William Howe Geib.

Longworth noted only three men, C.F. Martin and his associate Henry Schatz (listed together as Martin & Schatz) and Theobald Monzani, who specified in 1835 that they made string or wind instruments—Martin's employee Louis Schmidt does not appear in that year's directory—but in fact most instrument makers specialized in one type or another. Charles Christman, Allen Jollie, Thomas Longhurst, and Chabrier Peloubet, for example, produced woodwinds, mainly flutes, as did the partners John C. Rosenberg (not listed by Longworth) and Richard Schroeder, one of whose eleven-key, "silver tipt, ivory joint" flutes, valued at \$80, was stolen from Joseph Atwill (*New York Transcript*, 8 January 1835). As early as 1831 Charles Christman claimed to manufacture accordions and harmonicas, but these might have been French imports. On the periphery of the instrument-making trade, William Shute Tomkins, a cabinet maker listed from 1836, produced some extant drums, and the Howell Works Company cast bells to order. Outside the commercial arena, New Yorkers of all ages and varied backgrounds no doubt crafted simple instruments for their own use.

As work ebbed and flowed, journeymen piano makers often took up other crafts, particularly cabinet making, which periodically occupied George Sillick, among others. Longworth listed John Corbusier as a cabinet maker in 1835, when he is known to have worked for Geib & Walker. Henry S. Meeks (probably a relative of the furniture manufacturers Joseph W. and John Meeks) first appears in the 1824 directory as a cabinet maker, then as an instrument or piano maker, but as a "c[ity]. weigher" in 1835. The upholsterer Arthur Eggleso and the cabinet maker William Pethick went into piano making after 1835, the latter following the lead of John Pethick, presumably a relative. Conversely, Isaac Phyfe, Duncan Phyfe's eldest nephew, worked on pianos in the 1820s before turning to the upholstery trade. The piano maker John Ross built "motors" for pipe organs. His colleague Robert Sprowll sometimes worked on organs, and Israel Suydam was at various times a piano maker, cabinet maker, plow maker, grocer, and liquor purveyor.

### PIANOS IN PARTICULAR

BY THE 1830S, PIANO CONSTRUCTION, LIKE ORGAN BUILDING, WAS OUTGROWING THE limits of traditional workshops that employed only a few journeymen and apprentices under a master's direct supervision, altogether producing only a handful of pianos annually. Market expansion and rising overhead costs were gradually leading to concentration of production in sizable manufactories which adopted a rational division of labor, not necessarily all under one roof. Already in 1824, Loud & Brothers' large workforce in Philadelphia reportedly turned out 680 pianos; Broadwood & Sons' factory in London completed about 3,000 in 1835. Following the approach of these and other major manufacturers including Clementi (later Collard & Collard) in London and Erard and Pleyel in Paris, in New York a system was emerging wherein prolific firms like Firth Hall & Pond and Nunns Clark & Co. might engage a dozen or more semi-independent workers, some specializing in such operations as case construction, veneering and finishing, key making, and action assembly. How much specialized work was done by low-paid out-workers, including women and children, is unknown. Probably no New York piano producer in 1835 directly employed many more than about twenty adult workers, the minimum defining a "manufactory" by today's convention, but proprietors often called themselves manufacturers regardless of the size of their operations.

29

Like small-time cabinet makers, minor piano manufacturers typically housed their workrooms and showroom, and sometimes themselves, in one building, where they might also undertake repair work and sell imported instruments and related goods. Larger outfits maintained separate production facilities—Nunns Clark & Co., for example, uptown on 26th Street. No manufactory of any size was self-sufficient; all depended on outside suppliers for components such as steel and brass wire and miscellaneous hardware, rough-cut timber, and even paper labels. Ordinary lumber, leather, cloth, turpentine, screws and glue, as well as simple castings, were obtained from producers in the Northeast; mahogany, rosewood, ebony, ivory, shellac, copal, and highquality locks and hinges came from abroad through local dealers. Most music wire was imported, but Melville Kelsey's and Simeon Dunn's wire factories in New York might have produced some, perhaps using drawing blocks advertised by the machinist and bell hanger James Cox. Another New Yorker, John C. Robertson, produced piano tuning pins (called wrest pins); he also made iron railings and must have been a blacksmith.

A fashionable Firth Hall & Pond cabinet piano now in The Metropolitan Museum of Art was bought in 1835 by Anson Baker of 36 East Broadway, a silver plater, vice-president of the General Trades' Union, and chairman of the Union's committee on State Prison labor. Baker's neoclassical-style piano incorporates a cylinder-fall keyboard cover secured by a lock stamped "Patent T. Cadwallader," probably the London ironmonger Thomas Cadwallader. William F. Harrison, a bank note engraver, produced the elegant paper label recessed in the nameboard; Harrison might also have executed labels for C.F. Martin. The piano's mercury-gilded decorative hardware probably came from France. Who actually built this instrument (serial number 337) for Firth Hall & Pond is unknown, but its mahogany cabinetry resembles some from the high-class furniture manufactory of Joseph Meeks & Sons. Unlike Loud & Brothers' journeymen, who often signed their work, no craftsmen signed Anson Baker's costly piano, but clearly it occupied many hands and incorporates material from many sources.

During the second quarter of the century, massive iron reinforcement of piano cases, prefigured by the unitary frame patented in Boston by Alpheus Babcock in 1825 and adopted much later in New York after much controversy, introduced operations foreign to woodworking. English furniture made entirely of cast iron showed the promise of this inexpensive material, still novel in the 1830s. The Price Book mentions fitting, boring, and pinning "metallic" plates, but these were only hitchpin plates, often of brass, not entire cast-iron frames with integral struts. Yet even these simple, flat plates, meant to withstand rising string tension and to improve string scaling by placing hitch pins close to the soundboard bridge, complicated the piano business by increasing its reliance on outside suppliers and specialized metalworkers. This development moved piano manufacture further toward compartmentalized division of labor, a system propounded by the eighteenth-century economist Adam Smith and common in many industries by 1835. Significantly, the Price Book distinguishes

among case makers, finishers, and turners, and implies that a journeyman might have "a steady job at keys."

Furthermore, as the pressure of merchandising, raising capital, and coordinating operations gradually disassociated proprietors from regular bench work, production came to be overseen by experienced foremen or managers who mediated between entrepreneurs and workers. In the 1830s it was becoming difficult for any individual to master every phase of piano production from design to tuning, as had once been normal and remained so for luthiers, whose solitary handicraft was scarcely affected by the Industrial Revolution. Americans like Alpheus Babcock and Jonas Chickering who knew the craft of piano making thoroughly were becoming exceptional, but theirs, principally, were the practical ideas that drove innovation. Patent records reveal the energy American inventors devoted to pianos. Of thirty-five music-related patents awarded during the years 1830-39 (thirteen to New York City inventors), twenty-three covered some aspect of pianos. But no matter how well intended, few of these inventions led anywhere. Many were gimmicks advanced merely for the sake of novelty. It remained for the Chickering and Steinway firms to put distinctive American pianos on the world stage, but in 1835 this accomplishment could not be foreseen.

For the time being, New York's piano manufacturers seemed content to develop existing models rather than experiment with radically new ones as Babcock was doing (Babcock worked in Philadelphia from about 1830 to 1837, then returned to Boston). The same conservatism characterized Henry Erben's organs, and, for that matter, the efforts of local composers. Given the limits of the typical amateur's repertoire and the nature of the thriving market, no musical or commercial need compelled basic changes to a successful structural formula. It seems that New York's piano manufacturers focused instead on increasing production and lowering costs, competitive goals that put additional pressure on journeymen.

Productivity depended increasingly upon utilizing more or less interchangeable parts made in batches, sometimes evidently by contractors who supplied several workshops; hence, nearly identical parts such as legs and bases occasionally appear in differently labeled pianos. A seventy-three-note (FF-f<sup>4</sup>) John Tallman square piano in The Metropolitan Museum of Art has an iron hitchpin plate capable of accommodating seventy-eight notes (CC-f<sup>4</sup>), indicating a "one size fits all" approach. The piano's elaborately carved double-pedestal base seems to have come from the furniture shop that supplied similar bases to Thomas Gibson and Sylvanus Pond. The Price Book refers to making book desks, or music racks, twelve at a time, actions five at a time, and veneering legs twenty at a time, a method that saved both time and money. Lower prices applied when journeymen received parts already roughed out ("jacked," hence a jack plane) or when, as in cutting ivory, "a man is furnished to turn the large wheel" that drove the saw.

Although batch production pointed toward standardization, many prefabricated parts still had to be individually fitted and adjusted for each instrument, while casemaking could involve custom woodwork for the many options spelled out in the Price Book. Journeymen charged premiums for especially tedious operations. For example, lettering a long block, or wrestplank, presumably with pitch designations next to the tuning pins, cost six cents when written with a pen, twelve cents when lettered with printer's ink and type, and eighteen (misprinted as 78) cents when printed with a pen, probably to imitate a typeface.

The emerging compartmentalized system, though not necessarily more efficient than old-fashioned methods, was more productive and economical. Piano manufacturers and retailers could now more readily keep popular models in stock for customer selection, rather than fill orders one instrument at a time. Cost control in turn helped stabilize prices; a new American square piano typically retailed for \$200 to \$400 at least from the 1820s through the 1840s, despite the market collapse in 1837. An undated price list of the New-York Pianoforte Manufacturing Company (about.1838; in The New-York Historical Society) specifies eleven styles of six-octave squares "with two pedals, metallic plate, and brace, and long sounding-board" ranging from \$240 to \$500 depending on the casework (each additional half-octave cost \$50), cabinet and harmonic pianos from \$350 to \$700, and grands "with metallic tubes" made to order starting at \$600.

At these prices, new pianos lay beyond reach of most workers' budgets unless bought with borrowed money or on credit, or rented. A patient buyer might wait for a clearance sale. When the manufacturer Thomas Gibson prepared for retirement, he offered some pianos "just finished . . . during the dull season, and under the immediate supervision of T.G., who, wishing to decline the Piano Forte making business, will sell at low price" (The Evening Post, 2 January 1835). Cost, however, posed no barrier to upper-class ownership. Increasingly, handsome pianos were deemed necessary for genteel residences, especially those with female children, since nineteenthcentury mores constrained respectable young women's activities outside the home. (Notions of female respectability hardly applied to poor or working girls, but some high-priced prostitutes boasted musical accomplishments.) Aspiring middle-class families sought pianos too, as a recognized mark of social distinction. An article in the National Trades' Union (12 July 1834) decrying inequality between merchants and workers, remarked, "One purchases an elegant piano or a sofa, the other can hardly find means to get a load of wood." We can only imagine what urging prompted this anonymous advertisement in the New York Transcript (19 November 1834): "Wanted-A Piano Forte in exchange for unimproved land in this State. Inquire at the drugstore corner of Essex and Hester sts."

Interior views of the period show how pianos were housed. Asher B. Durand's popular engraving *The Wife* (from *Atlantic Souvenir*, 1830) after a painting by Samuel F.B. Morse, depicts a young husband and wife relaxing in their small but comfortable drawing room. A tall cabinet piano stands next to the fireplace where it could hardly stay in tune for long; but together with the hearth, the piano evokes leisured domesticity and promises warm, congenial hospitality, no matter that the pianist has



### THE WIFE

*The Wife*, engraving, Asher B. Durand after Samuel F.B. Morse, from *Atlantic Souvenir*, Philadelphia: Carey & Lea, 1830

to sit with her back toward her listeners. Like the parlor's elegant furniture and richly framed paintings, the imposing upright piano represents this household's elevated taste, while at the same time it occupies little floor space. Such cozy images, which mirrored Biedermeier sentiments abroad, stimulated middle-class demand for pianos.

Reality sometimes fell short of this pictorial ideal. In his diary on 5 January 1835, Philip Hone ruefully quoted the actress Fanny Kemble's account of a party at his home, where Kemble "sang for them two or three things, but the piano was pitched too high for my voice; by the by, in that large, lofty, fine room they had a tiny, old-fashioned, becurtained cabinet piano, stuck right against the wall, unto which the singer's face was turned, and into which his voice was absorbed.' (I am afraid she is right about the piano. I wish she knew that I bought it upon Dr. McLean's recommendation, who has some conceit of himself in these matters, and that it cost me seven hundred dollars.)" Hone's medical friend Hugh McLean might have been related to J. Sylvanus McLean of New Jersey, who obtained the first American piano patent in 1796.

As technology advanced and buyers became more discriminating, the average quality of New York-made pianos, judged by design, materials, and workmanship (musical qualities are harder to assess), might actually have improved between 1815 and 1835. Quality did not necessarily suffer as a result of greater productivity, since increasing specialization and use of modern machine tools such as circular saws for rough-cutting lumber, introduced about 1814, and planing mills for smoothing, patented in Poughkeepsie by William Woodworth in 1828, were not inimical to fine craftsmanship utilizing hand tools. In any case, mechanization did not necessarily lead to industrialization; as the Price Book indicates, piano making, like ship building, remained highly labor-intensive and artisanal. Perhaps one reason New York's journeymen piano makers and shipwrights remained outside the General Trades' Union was that they did not fear mechanization; whether they would have joined the Union had the panic of 1837 not derailed union organizing is a moot question.

Even though pianos produced by, say, Dubois & Bacon, Firth Hall & Pond, and Nunns Clark & Co. in the 1830s were not necessarily better or worse than the best ones made in New York two decades earlier by Gibson & Davis or the Geib firm, the later pianos were generally larger and louder and so accommodated a broader, more Romantic repertoire. Earlier or later, even pianos of the same design from the same shop could sound quite different from one another, but tonal inconsistency was no defect; rather, it resulted from honest individuality of workmanship and natural variability of materials. Unfortunately, regardless of their merits, few pianos from the 1830s and earlier survive in good condition; accidents, maltreatment, and obsolescence caused most to be destroyed. Loss of their instruments precludes assessing the accomplishments of, among many other firms, John Abbot (or Abbott) and Bridgland & Jardine, whose pianos won first and second place respectively at the 1835 American Institute fair. (John Jardine's brother George became a successful New York organ builder.)

### THE PRICE BOOK

PUBLICATION OF THE PIANO MAKERS' PRICE BOOK STEMMED FROM LONG-ESTABlished practice. The New-York Society of Journeymen Cabinet Makers' *New-York Book of Prices for Manufacturing Cabinet and Chair Work* (1817 and 1834) was one obvious model, and price books in much the same format circulated both in Great Britain and America at least a generation earlier; some have been described by Charles F. Montgomery and Martin Eli Weil. In contrast to the belligerence expressed in some London furniture makers' price books, those issued in Edinburgh are noteworthy for having been the agreeable outcome of negotiations between journeymen and masters. To what extent New York's journeymen piano makers might have negotiated wages is unknown, but like other societies theirs might have formed an internal "committee on prices of work" and appointed representatives to discuss terms with employers.

Journeymen's price books prescribed standard labor charges (not including materials and retail mark-up) to be paid by employers; these standards aimed to end arbitrary pay and exploitation and to reduce uncontrolled competition from contractors and outworkers. Unlike journeymen's price lists, most of which circulated privately, even secretly, the architect James Gallier's *American Builders' General Price Book and Estimator* (1833) was widely distributed. Gallier's book covers all building trades (masonry, carpentry, plastering, painting, and others) and provides information not readily found elsewhere, much of it relevant to contemporary piano making. His prices are descriptive rather than prescriptive: Assorted cut nails cost eight cents per pound, <sup>5</sup>/<sub>6</sub>- and <sup>3</sup>/<sub>4</sub>-inch screws thirty-five cents a gross, flint glass knobs \$1.25 per dozen, best glue 31<sup>1</sup>/<sub>2</sub> cents a pound, boiled linseed oil \$1.12 a gallon, glass paper 31<sup>1</sup>/<sub>2</sub> cents a quire. One coat of the best copal varnish cost eighteen cents per square yard, two coats thirty cents, three coats forty-two cents, polishing added eight cents, while spirit varnish cost twelve cents a yard. Gallier gives a useful table of timber prices, and distinguishes between baywood and Spanish mahoganies.

According to Gallier, in 1833 a laborer's daily wage averaged one dollar, while a carpenter earned about \$1.44 and a mason or plasterer \$1.62½. For comparison, three unnamed Boston piano manufacturers responding to a survey ordered by Secretary of the Treasury Louis McLane in 1832 each reported employing twenty men at \$1.75 per day, 310 days a year; aside from Sundays, only three annual holidays were allowed. (McLane's survey did not include New York City manufacturers.) Because journeymen piano makers were normally paid by the piece rather than salaried, their income was unpredictable and job security was unknown. The standard workday lasted ten hours. To extend their working hours, New York's journeymen agreed to provide their own candlelight, necessary during winter's short daytime. As independent artisans, they owned their hand tools and believed they also owned their labor, for which they felt entitled to set fair prices. After all, judging from Boston statistics, wages accounted for only about twenty-three per cent of a new piano's retail value.
#### INTRODUCTION

Such discipline could be harsh. The *National Trades' Union* (14 and 21 November 1835) reported a brouhaha over the tarring and feathering of the piano maker Thomas Browning, who, another newspaper alleged, had been attacked by mistake, the outrage having been aimed at James Jackson, "superintendent of the piano-forte manufactory of Messrs. Geib & Walker." The accused assailants responded in an open letter (*National Trades' Union*, 28 November 1835) addressed "To the Mechanics of New-York and the public generally":

Whereas, there having appeared in the *Morning Courier and New-York Enquirer* a scurrilous and libelous account of the workmen in the employ of GEIB & WALKER, relating to their 'strike' against James Jackson—wherein it is stated that we (the said workmen) had no other objection to him than that he was not a member of the Journeymen Piano Forte-makers' Society, or as he calls it, (we suppose by an intended mistake,) Trades' Union; and the same account having been trumpeted about by most of the aristocratic editors in this city, in order to prejudice the public mind against Trade Societies—we think it necessary to give the public a fair statement of the facts.

The reasons we had for striking against James Jackson were, that he was (what is generally termed by the trade) *a Black*; that he had done work for Geib & Walker for considerably less than the prices established by the trade; and that he had taken work from some of the Cabinet-makers in this city which he had also done under price, knowing his error at the same time. And knowing that his willingness to join our Society, and be governed thereby, was only acquiescing in the wishes of our employers, (who knew he would not be admitted into the shop without;) and believing that a man of such principles would, in all probability, turn traitor in times of trouble; and as he was undeserving the benefits of the wages we had been laboring to establish, which he at the same time was working to injure, we thought it right, if possible, to keep him out of the trade; or, at all events, for our own credit['s] sake, to refuse to work with him, or associate with him in any way whatever.

And we can further state, that the Journeymen Piano Forte-makers' Society had nothing to do with the tar and feathering [of] T. Browning; neither do they belong to the Trades' Union. But whoever they were that did the act, it cannot be supposed that they were mistaken in the man, as Browning was also *a Black*, and had, a short time previous, been expelled from the Society for working under price.

These are the facts, of which we have an abundance of evidence; and we believe there is no man who is a friend to truth, honor, or justice, that can blame us for what we have done, or countenance the editor of the Courier and his colleagues in their calumny and lies.

> THOMAS BRONER, JAMES DWYER, THOMAS SHAFF, EDWARD HEARNE, ASA HOWARD, F. ROBBINS, JNO. P. CORBUSIER, WM. LINDEMANN.

The damning epithet "aristocratic editors" sharply delineates the antagonistic interests represented in this confrontation. Although couched in milder language, the preface to the Price Book likewise reflects deeply unsettled labor relations, which came to a head in 1835 in *People v. Fisher* (14 Wend. 9). In that case, Chief Justice John Savage of the New York Supreme Court sustained a criminal conspiracy indictment against journeymen boot makers for "combining," or organizing, to fix prices for their work, since conspiring to coerce employers to raise wages was a misdemeanor. Judge Savage's opinion that the price of labor should be left to regulate itself, testifies to larger class conflicts soon to be addressed by Karl Marx and Friedrich Engels.

The Price Book's author(s), printer, and publication date remain obscure, as does the identity of "M.V.," evidently the source of the biblical-sounding maxim on the title page, "He that loveth right, loveth his neighbour." No copyright notice appears; copyright protection would have been unnecessary for a privately circulated, ephemeral publication. The book was obviously rushed into print. Its errata list leaves many typographical errors uncorrected, for example, p. 1, "venedr" (veneer); p. 4, "sliping" (slipping), p. 39, "cotage" (cottage), p. 56, "grain off" (grain off). Samuel Ackerman's six plates of "imperfect" illustrations—unshaded outlines or templates of varying scale—were adopted reluctantly because "it was imperatively necessary to have the Book of Prices completed immediately." (Samuel Ackerman, an engraver and printer, might have been related to the music printer George Ackerman.)

Whether this haste was aimed to forestall or precipitate a walkout or help end one is unknown, but a strike could easily have occurred if proprietors rejected these terms. Nevertheless, the maxim and other polite language show that the piano journeymen, like their comrades in other trades, desired to be perceived as fair. While claiming their American birthright to associate in pursuit of their own advantage and to regulate their prices—legally risky assertions—they sought thereby to benefit not only themselves but also their employers, who were also vulnerable to inflation. However dire their situation, New York's piano makers did not yet feel ready to imitate their exasperated colleagues in Philadelphia, who defied employers by starting their own cooperative piano manufactory in 1834. The cooperative New-York Pianoforte Manufacturing Company opened only about 1837, reportedly around a nucleus of disaffected Nunns Clark & Co. workers.

The Price Book specifies many materials, including brass, cloth (evidently sometimes meaning felt), gauze (for back panels), iron, ivory, lead (for key weights), leather (including morocco), paper punchings (for shims), parchment (for hinges), silk (for front panels), and woods: apple, ash, bass, beech, birch, cedar, cherry, ebony, holly, king, mahogany (including crotch), maple (including curly, root, and birds-eye), pear, pine, rosewood, satinwood, spruce, white wood (that is, tulip, or poplar), and zebra. According to Spillane, makers favored Adirondack and White Mountain spruce for soundboards. Oddly, no mention occurs of chestnut, oak, and walnut, structural woods common in organ building and also used in some pianos of the time. Oak figured importantly in the Gothic style, acknowledged in the Price Book as a form of decorative panel; see Table 8.

New York's biweekly *Shipping and Commercial List, and New-York Price Current* regularly printed prices for lumber, ivory, skins, and other commodities used in instrument construction. However, except for C.F. Martin's accounts, scant evidence survives from the 1830s concerning New York instrument makers' purchases of materials. In 1836, according to Philip F. Gura, Martin paid John M. Phyfe (doubtless a relative of Duncan's) \$4 each for two sets of "extra fine" piano key ivories, perhaps destined for repair work or to be resold. The availability of pre-sawn ivories points to outsourcing and specialized division of labor.

A manuscript account book (in The New-York Historical Society) from the lumber yard of Garret and George Green records a series of lumber sales to Thomas Hall, possibly the organ builder who was Henry Erben's brother-in-law, former master, sometime partner and employee. Hall's purchases, of wood suitable for framing and casework, occurred frequently and in small amounts, suggesting that he selected boards and planks individually and bought them as needed. Delivery came from either the yard or a dock. As was normal, prices were noted either in cents or shillings/pence; the shilling was equivalent to one-eighth of a Spanish dollar:

3 July 1834	dock	31 plank at 16c
		cartag[e] by N[icholas] Sickels <sup>1</sup> ⁄ <sub>6</sub>
5 July	dock	20 boards at 16c
14 July	dock	2 plank at 25c
•	yard	4 clapboards at 1/
18 July	yard	423 ft H L [hemlock] timber at 12/
	yard	183 ft pine timber at 13/
23 July	dock	60 boards at 1/
-	dock	10 plank at 16c
8 August	dock	8 plank at 16c
9 August	yard	1754 ft of timber at 13/
	dock	10 jois[ts] at 12c [etc.]

Supporting the supposition that this Thomas Hall might have been an instrument maker, the Greens' account book records similar sales to Firth & Hall:

30 December [ <i>recte</i> October] 1834	yard	518 ft of 2 in. plank at 3c
		cartag[e] by Sickels 4/
31 October	yard	1247 ft of 2 in. plank at 3½c
		cartag[e] by Sickels 8/

These softwood planks might have been used to build pianos, since Firth & Hall, or Firth Hall & Pond, commenced organ production only in 1838 with subcontracts to the English immigrant Henry Crabbe. (William and Thomas Hall seem not to have been related.) More expensive hardwoods and fancy veneers would have come from specialized purveyors such as Thomas Constantine, a former cabinet maker and, like Anson Baker, a vice-president of the General Trades' Union. Like C.F. Martin's, Constantine's company remains in business today.

Explaining how pianos were made exceeds the scope of this Introduction, but John Koster's description of a representative John Tallman square piano will help readers visualize their construction. Most of the Price Book's woodworking vocabulary remains current; some possibly unfamiliar usages include black-leading (graphiting), cock-bead (a molding that projects above the surface), crook (angle), ferreting (cloth woven between strings behind the bridge to stifle unwanted vibration), hollow (concave), munting (muntin; a vertical piece separating two panels), nurling (knurling; cutting beads or ridges), pricking (marking with a point), quirk (sudden change in direction), slipping (affixing a slip of wood), sweep (curve). Other unfamiliar terms are defined below. Contemporary descriptions of common tools and joinery methods appear in Peter Nicholson's *The Mechanic's Companion* (1831). Charles F. Hummel's study of the Dominy family of East Hampton, Long Island, provides information about clock makers' tools, which differed little from piano makers'.

While the Price Book's litany of parts and procedures seems comprehensive, it omits some that might be expected. No price appears for bending sides for grand pianos because American firms at that time produced grands only occasionally; the Geneva (New York) Historical Society preserves a rare example produced about 1835 by Nunns Clark & Co. The book does not price tuning and tonal finishing, operations evidently performed by masters or especially skilled technicians. (The *Oxford English Dictionary* traces the word "technician" back to 1833, but professional piano technicians, distinct from makers, existed earlier.) Little is said about legs, which like piano stools came mostly from outside suppliers; plinths, pedals and pedal lyres, and feet, on the other hand, seem ordinarily to have been made in the piano shop, hence their inclusion in the Price Book. No prices appear for fabricating ornamental hardware such as brass collars for legs and centerpieces for silk panels; like hinges, locks, and castors, these items came ready-made, often from abroad.

Detailed tables price veneering, banding, stringing (inserting thin decorative strips of wood or brass), and molding, all painstaking labors. Crotch veneer, for example, demanded expert matching of grain, and veneering curved surfaces called for special clamping molds and cauls. Painting and japanning of furniture had gone out of fashion by 1835 but French polishing, or *plaque*, involving multiple coats of clear varnish, was "in," yet the Price Book ignores that process. However, the book includes buhl work, or *boule* (inlaid brass ornament) because that technique involves cutting wood. Gold and bronze powder stenciling and gold leafing commonly took the place of expensive buhl, but stenciling and gilding, too, are passed over. John Koster attributes gold decoration on two of John Tallman's pianos to the engraver and copperplate printer Samuel Maverick, but Maverick, who incidentally produced Henry Erben's trade cards, only lettered Tallman's nameplate inscriptions.

It seems, therefore, that specialized surface finishers rather than piano makers normally stained, stenciled, and varnished case exteriors, perhaps in separate workshops away from woodworkers' sawdust. (Zacharias Thompson, identified by Longworth as a piano maker in 1835, appears as a varnisher in 1836.) However, piano journeymen charged twenty-five cents for varnishing a soundboard and case interior, areas that were usually concealed and so not always finely finished. Journeymen also charged twenty-five per cent extra "when locks or catches are let into work that is [already] varnished," twelve cents extra for fitting and gluing a previously varnished and polished brace, and three cents each for filing and lacquering hinges.

New York pianos of the period commonly have six-octave (or seventy-three-note, FF-f<sup>4</sup>) English- or French-type actions with fifty-six dampers; the top seventeen notes, left undamped, contributed some pleasing sympathetic resonance. Narrower or wider compasses could be specially ordered; a six-octave Firth & Hall upright of about 1832 (at Vassar College, Poughkeepsie, New York) was extended to DD-a<sup>4</sup> (eighty notes), a most unusual range. By 1835 many compositions required seventy-eight notes—European pianos normally ranged down to CC—and already in 1831 Ebenezer Currier in Boston patented a design accommodating seven octaves (eighty-five notes), though he was not the first American to propose this range. Supposedly, in 1826 Loud & Brothers constructed a seven-and-one-half-octave piano (a larger compass than the standard modern piano's) for a *nouveau riche* Louisiana planter.

So-called English actions were versions of the type with under-hammer (intermediate lever) and adjustable escapement jack, patented in London by John Geib Sr. in 1786. More complicated and expensive French-type actions, supposed to be better suited to rapid, brilliant playing, could have incorporated elements of the double escapement introduced by Sébastien Erard in 1821 and developed for square pianos in 1827. Mechanical advantages aside, adoption of French piano action designs, as of French furniture and decorative styles, reflected Americans' desire to appear more cosmopolitan and less dependent on British modes. As Frances Trollope remarked during her visit, "Every thing English is decidedly *mauvais ton*; English materials, English fashions, English accent, English manner, all are terms of reproach . . . ."

At the 1830 Mechanics' Institute fair, R. & W. Nunns won first prize for "the best square pianoforte, with the grand or French action," while Dubois & Stodart (some of whose pianos were manufactured by the Nunns firm) received second prize for squares "with the usual English action." The September 1831 *Journal of the Franklin Institute* mentions an action patented by John F. Nunns that might have been Frenchinspired, but its description is vague. The Kearsing brothers quickly responded by patenting a rearranged English action and a new method of looping strings to hitch pins. Jesse Thompson, a New York piano maker who had been a grocer, joined the 1831 patent parade with two versions of an atavistic action that eliminated many moving parts. Although the Price Book describes a confusingly named and heavily braced "square horizontal German grand action case," it makes no provision for so-called German actions, a distinct type that had occasionally been produced by Pennsylvania German builders as late as the turn of the nineteenth century.

To provide tonal contrast, a harp or buff device (a padded rail that presses against the strings, customary in German but not in English squares) might be furnished. Replacing long-obsolete hand and knee levers, wooden pedals, often mounted in lyreshaped supports, operated both the harp stop and the dampers. The Price Book does not mention an *una corda*, or action shifting device, often used to moderate the tone of uprights and grands, or swell shutters, sometimes installed over the soundboard of squares or behind the back of uprights. Presumably these options were among the "extras" for which prices had not yet been established.

The 1830s witnessed a transition in key design; either traditional, molded natural key fronts or newer, flat wood fronts could be ordered. Porcelain key coverings, supposedly invented by Charles Cartlidge, a New York earthenware maker, never caught on, and mother-of-pearl, used to cover some luxurious keyboards about 1850, had not yet come into vogue. Such alternatives as cloth (probably felt, recently introduced in pianos) or leather hammer coverings, and parchment-hinged or axle-pinned hammer shanks, also marked a transitional stage. Shades (evidently the thin, wide wood panels frequently mounted over the strings of squares—today called dust covers but more likely meant to deflect drafts that could upset tuning) would soon be outmoded, as would drawers beneath the case, pivoted candle boards, and fretwork decoration of nameboards, which might be straight or "sweeped" in various ways.

Specifying that tuning pins were to be furnished drilled for insertion of the end of the string indicates that this convenient feature, which became essential to prevent coil slippage as string tension rose, was not yet universal. The end of the string opposite the tuning pin could either be secured to the hitch pin with an eye, or loop, at the end (the Kearsings' patent specified several turnings around the hitch pin before twisting the short end around the tight wire) or simply be doubled around the hitch pin and returned to the adjacent tuning pin, as is normal today. Since forming eyes takes more time, this older method cost more; yet it is safer, since if one string of an independent pair breaks, the other string can still sound the note. The more economical practice (patented in Britain by James Stewart in 1827) of forming a bichord with one wire risks losing the note altogether if the string breaks-a risk made feasible by stronger cast steel wire, a recent English development that supported higher pitch. To withstand increasing string tension, iron or brass hitchpin plates (already installed on English squares by Charles Trute from 1781), iron braces, and brass treble bridge (nut) sections mounted on the "long" or "rest" block (wrestplank) were normal if not ubiquitous by 1835. Also becoming common was diagonal (cross or "angleway") soundboard grain.

Little is known about how antebellum American pianos were designed, tonally or structurally. This mostly empirical process pertained to masters and to specialists such as the itinerant action and scale (string layout) inventor Charles Sakmeister, a German active in New York about 1829-33. (In 1830 Sakmeister patented a downward-striking action, one of many then being introduced.) Once a design was worked out, journeymen might have executed it directly from measured drawings, perhaps laying out some elements geometrically and copying some parts from simple patterns or templates resembling the Price Book's engraved plates. According to the Price Book, journeymen charged seven cents for "getting out slips for harp stops, and shaping ditto to pattern." Soundboard bridges and bars were also "sawed to pattern."

Not surprisingly, different piano models served different musical purposes. In 1832, at Philadelphia's Franklin Institute, Loud & Brothers exhibited a delicatesounding square piano well suited for vocal accompaniment, and a louder, triplestrung square probably more appealing to a soloist. The imprecise nomenclature of piano models differed from today's terminology. A cabinet piano is a tall rectangular upright resembling a secretary desk; piccolo and cottage (also called harmonic) models denote short uprights. Nunns Clark & Co. advertised in 1835 that "they always have on hand an assortment of cabinet, harmonic, and square Piano Fortes from their manufactory."

Cabinet pianos usually have a framed silk panel enclosing the upper front, and a removable wood panel or pair of doors beneath the keyboard. Their keyboards have hinged covers, or falls, shaped to correspond to the profile of the flanking cheeks; flat falls naturally cost less than more elegant, curvaceous (cylindrical or ogee) ones. The Price Book mentions a seldom-observed feature of cabinet pianos, an opening in the top of the case for the tuning hammer. Confusingly, a cabinet piano could have a square, that is, square-cornered, case.

Square pianos, as such, are of course basically rectangular and horizontal, but might have rounded or protruding corners of various shapes that cost extra. Making a cupboard top for an astragal-front case cost twice as much as for a square-cornered one. Square piano soundboards could be either short, that is, limited to the rightside portion of the case, or long, extending toward the left behind the nameboard to conceal the key levers and hammer action beneath. Playing with the lid down, as was normal in parlors, lessens the acoustical benefit of the soundboard's soon-to-bestandard enlargement, but loudness wasn't everything; the cult of female domesticity favored "sweet toned" pianos.

Most squares and uprights of the period have a book desk (music rack) that folds out of sight when not needed. The term "fly finishing" (a fly is a hinged flap or lid) refers not only to preparing tops, lock boards, and falls, but also to making and installing book desks, music rests, frets (decorative fretwork panels inserted in nameboards and at interior case corners), leg and pedal blocks, pedal rods and levers, shades, drawers, keyboard end blocks and front slips, lid prop sticks, and other incidental parts.

In theory it ought to be possible to estimate the time needed to construct a piano after adding up prices for the many steps required, but such estimates, fundamental to gauging productivity, must be handled cautiously. According to Louis McLane's survey of three Boston manufacturers, who together produced about 500 square and cabinet pianos (worth about \$140,000) in 1832, it appears that each manufactory, employing some twenty men, finished one instrument in less than two days, but actual output would have varied widely. Assuming an average daily wage of \$1.75, building a basic square piano case priced at \$12 might have taken one journeyman nearly seven strenuous days not counting varnishing, but two men working together would have needed less than half that time. At \$4, making a small soundboard with appurtenances could have required about twenty-three man-hours before varnishing. Such rough approximations require adjustment for parts made in batches, and weather might have affected output because excessive humidity or dryness could cause delays. Most operations were priced to the cent, equivalent to a few minutes' work, but certain operations in shaping moldings and applying veneer were priced in quarter-cents, depending on dimensional increments of a quarter-inch. The United States had no quarter-cent coins, but such minutia added up considerably.

Labor prices also often varied with material, perhaps because a journeyman who spoiled a piece of wood might have had to replace it, so expensive hardwood would have carried a greater risk than cheap stuff. To reduce dependence on foreign lumber, in 1832 the Franklin Institute offered a silver medal for the best upright or square piano made of American wood. Manufacturers saved money by installing black-stained sharps instead of ones made of solid ebony, among other substitutions. Lower pricing might also apply to inconspicuously placed moonshine (swirl-figured crotch veneer), "not to be charged as crotch, except the men in the shop think it is worth it"—a noteworthy example of journeymen's discretion. Fierce competition among manufacturers demanded such economies and compromises, but judging from surviving square and cabinet pianos of average quality built about 1835, New York's journeymen held to standards of craftsmanship by no means inferior to English or French work. Closer investigation of the pianos themselves, and further analysis of the piano makers' Price Book, can only enhance our appreciation of these often slighted instruments.



Appendix I

Music-related listings in *Longworth's American Almanac*, New-York Register, and City Directory (New York: Thomas Longworth, 1835)

Abbott John piano maker Ackerman George music printer Albro William piano maker Andrews George musician Astor William H music teacher Atwill Joseph F music store Bacon George music store Baird Lyman piano maker **Ballard** James music teacher Bancroft Monson pianoforte music, fancy store Barker Matthew professor of music Barry Jacob musician Beames Jonathan musical instrument maker Benjamin Joel piano maker Benoit Louis professor of music Berger Andreas musician Berry William F organ builder Berti Anselmo professor of music Best James musician **Birch** Thomas music engraver Black Frederick C piano maker Blount George piano maker Boyle John T professor of music Brand John piano maker Brennison William piano maker Bridgland James M piano maker Bridgland & Jardine piano maker professor of music Bristow William R Bromberg & Co. Samuel music store Brooks Edmund musician Brotherton Elisha organ builder Brown John W piano maker Brown Philip musician Brown Thomas B piano maker Browning Thomas piano maker Browning Thomas jr piano maker Brumley A[ugustus] piano tuner Buckley William bell foundry Burke William A professor of music Butterworth Archibald H professor of music Cammayer John C piano maker

[66] Walker h 170 Chambers\* 3 Reade 172 Spring 409 Broome 6<sup>th</sup> Av corner 13<sup>th</sup> 201 Broadway h 53 Wooster 167 Broadway h 17 Crosby 72 Bowery 283 Delancey 395 Broadway 4 Dominick 27 Cityhall-Place 18 Batavia 21 Minetto 131 Chambers rear 59 Crosby 152 Thompson 373 Broadway 100 Ludlow 95 Canal 22 Fifth 8 Batavia 9 Walker rear 14 Spring 139 Amity 465 Broadway h 338 Bleecker 465 Broadway 197 Bowery 12 Maiden-lane 155 Delancey 125 Change 220 Division 9 Thompson 239 Greene 142 Hammond 60 Hammond 31 Reade 57 Mulberry 81 Rivington 131 Amity 381/2 Division

### THE NEW-YORK BOOK OF PRICES

Castaing Augustus H Chambers Thomas H Christian Paul Christman Charles G Clark John Coard William Corcoran Peter Cowan Ann Cowan John Cregier Michael V Cuff John Daponte Lorenzo Davies Edward Davis Francis Davis Morgan Debaun Peter Dederer Levi Defries Ambrose Deluce Nathaniel Dent James Desabaye Mark Dingley Charles Dixon John Dixon Eliza Dodworth Thomas Dowling Michael Doyle Thomas J Dubois William Dubois & Bacon Dunham John B Dwyer James Endicott George Enstein John H Erben Henry Erben Peter Etienne Denis G Fairbanks Ransom A Farrand Daniel A Fawcett John Fehrman Edward Ferrero Stephen Ferrier John Firth John Firth & Hall Foster Caleb T Gassin Andrew Gassin Joseph Geib Adam Geib William

musician piano maker professor of music musical instrument maker piano maker professor of music musician professor of music music printer piano maker musical instrument maker professor of Italian piano maker musical instrument maker piano maker piano maker pf manufacturer, pf tuned & repaired musician music teacher piano maker professor of music music teacher piano maker music teacher professor of music instrument maker piano maker music store music store piano maker piano maker lithographer, music dealer organ builder organ builder professor of music professor of music music teacher piano maker organ builder music teacher musician musician musical instrument maker music store piano maker piano maker piano maker music store

281 Houston 31 Crosby h 241 Orange 18 Rivington 398 Pearl 137 Broadway h 21st near 3rd Av 418 Broadway rear 52 Cherry 77 Murray 173 Chatham 395 Broadway 166 Spring 342 Broadway 142 Elm 238 Bowery 64 Church h 32 Chapel 181 Bleecker 67 Bayard 546 Grand 149 Spring 114 Orange 509 Houston Carmine near Bleecker ₄0 Madison 27 Stanton 15 Thompson rear 114 Orange 277 Pearl 167 Broadway h 13 Crosby 167 Broadway 3rd Av near 26th 13th near 5th Av 359 Broadway h 119 White 209 Elm 96 Centre h 163 Walker rear 136 Mulberry h 210 Mott 47 Mercer 185 Elm 3rd Av corner 13th 35<sup>th</sup> near 9<sup>th</sup> Av 177 Grand 21 Howard rear 102 Eldridge 1 Franklin Sq 1 Franklin Sq Broadway h 103 11<sup>th</sup> near 5<sup>th</sup> Av 95 Wooster 95 Wooster 23 Maiden-lane h 306 Mulberry 201 Broadway h 3rd Av near 12th

Geib & Walker Gentil Peter F Gerstenecker John Gibson Thomas Glenn Elijah B Godfrey Cornelius Godone Gaspar Goodwin Thomas Gorrin Cyprian Gorton Cephas Griffin Charles Guttwennyer Peter Hall Joshua Hall Thomas Hall William Hall William Hamm John Hammond Achilee Hawes George Hearne Edward Heath James Heidelberg Charles Henderson John Hewitt & Co. James L **Higgins Morris** Hill Warren Hoffman George Hoffman Warren Holder Charles J Holmes George F Horn Charles E Housman Abraham A Hoyer Charles F Hyne Jacob Jackson James Jackson Joseph L Jardine John Johnson William Jollie Allen R Iollie & Millet Jones Abner Jones David E Kearsing John sr Kearsing & Sons Thomas Kendall Frederick Kendall Thomas Lanckenau Richard Leaman Henry

Lewis Henry

music store professor of music professor of music piano maker organist piano maker piano maker musician music teacher piano maker piano maker musical instrument maker professor of music organ builder musical instrument maker musician musical instrument maker piano maker musical instrument maker piano maker organ builder music teacher piano maker music store musician musical instrument maker musician musical instrument maker piano maker piano maker professor of music piano maker music store & consul for Baden organ maker organ builder musician piano maker piano maker musical instrument maker music store professor of music musician piano maker piano maker musician musician professor of music organ builder piano maker

23 Maiden-lane 105<sup>1</sup>/2 Reade 79 Crosby 61 h 60 Barclay 39 Wooster 53 King 412<sup>1</sup>/<sub>2</sub> Broadway 7 Vandam 404 Broadway 172 Spring 27 2<sup>nd</sup> 129 Grand 29 Clarke corner Spring 96 Centre h 81 Mercer 1 Franklin Sq h 2 Dover 229 Sullivan 36 Thompson 172 Spring 12<sup>th</sup> near Broadway 13th near 5th Av rear 117<sup>1</sup>/<sub>2</sub> Orange 39 Lispenard 145 Grand 137 Broadway h 18 Howard 553 Broome 185 Chapel 475 Greenwich 282 Grand 193 h 196 Mott 22<sup>nd</sup> near 3<sup>rd</sup> Av **48** Greenwich 9 Burton 393 Broadway 113 Elizabeth 154 16<sup>th</sup> 391 Grand 465 Broadway h 513 Broome 15 Thomas 105 Elm h 201 Church 385 Broadway 45 Murray rear 83 Sullivan 107 Attorney 259 Broadway h 6th near 3rd Av 95 Grand 12 King 48 Delancey rear 114 Orange 73 Hamersley

Lindeman William Longhurst Thomas Lothian Napier Lucas John McCaffrey Patrick Mallev Francis Maroncelli Piero Marrener Peter William Marschhausen Theodore Marshall Thomas J Martin C. Frederick Martin William Martin & Schatz Meetz Raymond Mein Robert Metcalf Charles E Metz Julius Miller Frederick Millet William E Mills James B Monzani & Co. Theobald Moore Thomas Mundy Edward N Mundy & Pethick Munson Reuben jr Murray Edwin Myers Matthias Neil Hugh Neil James M Neilson Jason Neilson Samuel Nidds William Noser Joseph Nowatny Ignatius Nunns Robert Nunns Clark & Co Osborne John Pchellas John F W Pearson Joseph Peek David C Peloubet Chabrier Pemberton Iacob Perrin David Peterschen Pethick John Pethick William Pilkington H W Pinchard John P Pirsson Alexander T

piano maker musical instrument maker musician musical instrument maker professor of music musical instrument maker music teacher musician professor [of] tuning musician violin & guitar maker professor of music violin makers professor of music piano maker piano maker professor of music musician music store piano maker flute manufacturer musician piano maker piano maker professor of music musician musician bell hanger bell hanger piano maker piano maker musician musician musician piano maker piano makers piano maker music teacher music master piano tuner musical instrument maker piano maker piano maker William piano maker cabinetmaker professor of music musician organist

**₄**8 William 471 Pearl 373 Grand 134 Spring 45 James 32 Tenth 66 Lispenard 10½ Thomas 621/2 Barclay 35 Stanton 196 Hudson 150 Spring 196 Hudson 83 Leonard 96 Varick 77 Delancey 7 Mercer 376 Water 385 Broadway h 14 Harrison 27 Morton 73 Leonard 184 Varick 234 Bleecker h 641 Greenwich 234 Bleecker 146 Forsyth 66 Prince 28 Hester 43 Cityhall-place 420 Broadway 289 Washington 453 Broadway 455 Pearl 44 Centre 88 Mulberry 137 Broadway h 2<sup>nd</sup> Av corner 4<sup>th</sup> 137 Broadway, manufacturing establishment 26<sup>th</sup> corner 3<sup>rd</sup> Av w 201 Broadway h 14<sup>th</sup> near 6<sup>th</sup> Av 71 Varick 90 Cedar 55 Delancey 204 Hester 142 Elm 49 Norfolk professor of music 90 Mott 234 h 235 Bleecker 7 Morton 99 Beeckman 88 Mulberry 146 Wooster

Pirsson James Pirsson William Plain William Pleslin William Plowman John Pond Sylvanus B PoverWilliam J Prescott Thomas Price James B Provost Peter Randel Adonijah Randel Culver Randell John Raven Richard M Raven Thomas **Redstone** Thomas Reiff Anthony Reily Michael (Reinagle widow of Hugh Ridle Frederick Riley Edward C **Rives** Thomas Robertson John C Rogers Christopher Rogers George Ronnberg William Ross John Russell John Schaffer Elizabeth Schmelger Francis Schmidt Henry Schrick Anthony Schroeder Richard Sconcia John A Sillick George W Smith Albert G Snyder Joseph Spiller Joel M Spiller John Spiller J & J M Sprowll Robert Stanley Robert S Stans Jacob A Stella Albina Stevens Peter Suvdam Israel Tallman John Taylor Abraham Taylor George Taylor James B

piano tuner musician piano maker piano maker musical instrument maker musician music engraver professor of music piano maker piano maker piano maker piano maker piano maker cabinetmaker organ builder music teacher music teacher artist musician professor of music musician piano pinmaker professor of music piano maker musical instrument maker piano maker bell hanger music teacher musician music teacher professor of music instrument maker music teacher piano maker piano maker piano maker bell hanger bell hanger bell hanger piano maker musician professor of music teacher of singing musician piano maker piano maker professor of music professor of music music teacher

132 Perry 146 Wooster 69 Sullivan 57 Bedford 3rd near 2nd Av 102 Henry 12 Thomas 15 Renwick 47 Wall h 59 Grand 9 Commerce 120 Barrow h 10 Grove 111 h 80 Amos 15 Commerce 68 Sullivan 114 Orange 97 Goerck 9 Thompson 223 Elizabeth 103 Mercer)\*\* 14 Orchard 29 Chatham h 117 Wooster 39 Elizabeth 10 Rivington 136 Canal 287 4<sup>th</sup> 13 Thompson 94 Clinton 69 Charlton 8 2<sup>nd</sup> Av rear 59 Crosby 150 Greenwich 31 Greene 163 Mott h 191 Mulberry 271 Elizabeth 123 Barrow 385 Broadway 22<sup>nd</sup> near 3<sup>rd</sup> Av 28 Pell 28 Pell 28 Pell rear 140 Sullivan 1 Macdougal 159 Church 66 Canal 169 Church 230 Broome 15 Barclay 314 4<sup>th</sup> 593 Greenwich 38 Crosby

Tomas Daniel	piano maker	87 Warren
Thompson Zacharias	piano maker	3 <sup>rd</sup> Av near 24 <sup>th</sup>
Thornton Thomas	musician	57 4 <sup>th</sup>
Thurston Jasper	piano maker	259 William h 38 Wooster
Thurston Joshua	piano maker	259 William
Torp Otto	music store	465 Broadway
Torrence [Torrins] Edward	musician	98 East Broadway
Trust Henry J	harpist	40 Reade
Turner Richard	piano maker	66 Sullivan
Unger Ferdinand	professor of music	52½ Howard
Vanderbeck James jr	musician	189 Mott
Vultee Louis	prompter	62 Anthony
Vultee Louis H	professor of music	142 Bowery
Vultee William	musician	38 Chrystie
Wagstaff Thomas	organ builder	99 Reade
Wale William	piano maker	569 Greenwich
Walker Daniel & John	music store	23 Maiden-lane
Wallace John	musician	103 Murray
Warner William A	musician	87 Barrow
Waters Charles	piano maker	101 Allen
Watson John	music teacher	29 Hubert
Wentworth Richard H	piano maker	46 Crosby
Wheeler Lewis B	piano maker	35 2 <sup>nd</sup>
Williams Thomas	musician	24 Pell
Willis James	music teacher	415 Greenwich
Willson Charles	professor of music	115 Wooster
Wood Robert	piano maker	rear 112 Orange
Wood William	musician	248 Spring
Worcester Horatio	piano maker	6 <sup>th</sup> near 2 <sup>nd</sup> Av

- \* 'h' stands for 'home'
- \*\* The late Hugh Reinagle probably descended from the famous English musical family who included the composer Alexander Reinagle, deceased in Baltimore in 1809. Alexander's brother Hugh, a cellist, died in Lisbon in 1785.

Appendix II

[Title page]

Well-meant Advice from the Directors of the German Society in New-York, to Germans, who intend to immigrate to the United States of North America.

New-York: Printed by E. Conrad, 1833.

### [Text]

Well-meant Advice from the Directors of the German Society in New-York.

The undersigned *Directors of the German Society* in New-York have reached the conclusion that the majority of the many immigrants from Germany to the United States lack a proper notion of what they can expect here, and that the disappointment in which most of them find themselves not only has the disadvantage that many are misled, perhaps even in their late days, to give up a quiet, if also at the same time poor, life in their homeland, in order to try their luck in the unknown, but it also makes it harder, when they have arrived, to take appropriate steps in order to improve. The desire of the Society to see this evil corrected demands that the directors give here a true, balanced depiction of the situation of the German immigrants in this land, along with some advice.

Those immigrants to whom this is directed are divided into two main and three secondary groups: to wit, the *Well-to-do* and the *Poor; Artisans, Laborers*, and *Farmers*. We will first address the well-to-do class, people who own their home and a small piece of property and live either from a craft or from the land. When these people, wrongly directed by the many promising writings that play to their self-interest, determine to leave their homeland with their families, the first result is that, in order to meet the demands of the upcoming trip, the business they have been carrying on all the while is neglected. But the family's expenses continue on and, naturally, are increased by the necessary trip preparations. The property and the agricultural equipment and tools of trade that cannot be transported are sold, often for less than their real value, because they have to be sold and because often several families from the same area break up their properties at the same time, whereby the number of sellers is increased at the same time that the number of buyers decreases. Finally the trip is begun, which as a rule costs more than one expects, since one often suffers from

unexpected delays; also, the money one takes, depending on the different countries and regions through which one is traveling, is often exchanged many times, and the exchangers always take advantage of the lack of knowledge of traders. At the place of debarkation the ships' agents try to demand the highest possible rate of passage from the travelers. Attempting to save, they contract the passage without meals, and then lay in an amount of provisions adequate for a crossing of approximately 30 days. On a good trip this works well, but if the crossing lasts, as is often the case, 60 days, or even longer, then the passengers are forced to purchase provisions on board, and often have to pay very high prices. Finally they arrive in the country where they hope to reap the fruits of their sacrifices and the difficulties endured, their capital in any case greatly diminished,.

We will assume that it is in New-York where the immigrant lands, and will think of him as a hand-worker, since the situations for farmers and day earners will be considered next. Unacquainted with the language and the customs of the country, he feels lost in the large and expansive city; for New-York has more than 200,000 inhabitants, mostly merchants, with the usual mix of seafarers, artists, artisans, laborers, etc., who speak, on the whole, only English. The stranger can be understood by no one; but finally a couple of Germans are brought in, and he is pleased to hear himself addressed in his mother tongue. Unfortunately, though, among these people who appear as translators and agents, there are those who look for the ignorant in order to take unfair advantage, and against whom the stranger has reason to be on guard. Occasionally there are landlords who take those who have arrived into their homes, where, with all manner of false promises, they attempt to keep them until the last farthing has been spent; then they bring them to the German Society, or simply throw them out on the street. If people who still have money are perhaps offered work, these landlords persuade them the pay is too little. Occasionally they contract them for a poor rate of pay to tradesmen, and themselves are paid a considerable fee. In both cases the newly arrived lose the little they have, and when they discover too late that they've been deceived, they are often despondent, and grief and the influence of the changing circumstances throws them into illness and makes them in this way reliant on the help of strangers, which they wouldn't have had to claim if from the beginning they had gone to work. When such a plight happens to the father of a large family it is particularly lamentable. Quite often it happens, meanwhile, that improvement begins exactly then, because the immigrant, having made a proper assessment of his situation, now can act properly. He either goes to the interior of the country, to a region where many Germans already have settled, or he takes on reasonably well-paid work, and attempts through industry and thrift to earn so much that he eventually can establish himself either here or in some other place.

It is appropriate here to acquaint the German artisan with the fact that in this country there are no guilds [*Zunft-Privilegium*]. Anyone who wants to can work in any field he chooses. The result of this is incredibly strong competition among work-

ers, through which it has happened that many things made here are either better or at least made in a simpler and less time-consuming manner than in Germany. The hand-worker coming from Germany not only is faced with a language he doesn't know, but also has the disadvantage of facing working methods different from what he knew. Neither of these difficulties is insurmountable, and once a competent and industrious worker has surmounted them, in this country he can make both a good livelihood and progress. If, then, such a worker, after careful consideration of the difficulties with which he will battle, nevertheless makes the decision to move with his family to this country, which, on the other hand, on account of the still relatively small population, does offer advantages, the following is the *well-meant advice*, which the undersigned recommend be followed in order that he more easily reach his goal.

He must not only be thrifty with his cash, but also go about selling his property and other assets with the utmost care, it being better to wait for a better time than to sell these badly at an inopportune time, at the same time devoting himself doubly to his profession while living a frugal life; first, so that where possible he can increase his means, and also, in order to accustom his family to the privation to which they later might be subjected for a time. Once he has exchanged his possessions for money, he must, by means of a careful inquiry, calculate his travel costs, to which the appended recommendations to this small publication may serve as a guide. In addition to the required sum he should also lay aside <sup>1</sup>/<sub>4</sub> of the amount for extraordinary circumstances, so that he doesn't fall into financial difficulties along the way; then, before the departure, where possible, he should exchange with someone he knows well for the various currencies he will require during the trip. In order not to make the trip more difficult and expensive by carrying non-essential items of only little worth, he should take only the things named at the end [of this article]. The provisions also listed there should be purchased at the seaport from which he is leaving. With whatever portion of his fortune remains he should purchase either French gold or silver coins, or purchase from a legal and reliable banker, such as an agent with the packet, a letter-of-credit on a bank on which he can draw the money when he arrives. By this latter means he reduces the risk of being robbed, either underway or immediately on his arrival in America, as has already happened to many immigrants. Once arrived, he should search for work, without committing himself for too long a period, even if at first for low pay. In most cases he will at least be able to earn his keep right from the beginning, and once he has learned the language and the way of working, he can demand more. Should he not be able to find work immediately, as is often the case, since a lot of immigrants from England, France and other countries end up here, he must immediately travel further, either to interior Pennsylvania or to the state of Ohio, where many Germans have settled, and where, therefore, the potential for work is greater. Also, there are other areas of this country where there are many German settlers to whom the immigrant can easily apply. The trip to some of these regions is far, to be sure, but because of the general communication via steamboats and canals, it

is neither difficult nor expensive. Along the way he will often be approached either by people who are lazy and idle and will never be able to prosper, or who are discouraged and at halfway have turned around, and who now attempt to convince him to return as well. We advise him not to let himself be led astray, for we cherish the conviction that the industrious and skillful worker will always find a place in the interior of the country where his work can guarantee him and his family a good living. Naturally he will have to adopt other customs and traditions, perhaps even give up some pleasures that were customary in the fatherland; but he can live without worry if he is industrious and thrifty. The more financial means he brings with him to the place where he settles, the easier and better will the immigrant be able to establish his future. He will do well, therefore, to spend as little as possible of his money. Also it is to be recommended to him that on the trip to the interior he guard his cash, and that he hide it at all times; for there are many who, because they were careless, were robbed.

Well-to-do farmers, in order to get here, will naturally handle things in exactly the same way as the artisans. After their arrival, however, they should immediately move to the country, if possible directly from the ship; either to Pennsylvania through New-Brunswick to Easton and from there further, or also to Ohio via Albany, Buffalo, etc., until they find an area where they can buy cheaply, or where, with established kinsmen, work with pay is available. In many instances they would do well not to refuse this option, since they in this way become familiar with American farming practices, which in many ways differ from German ones, and afterwards, with better expertise, they will be able to invest their money to greater advantage.

We come now to the poor class, most of whom are laborers or day-earners, and some of whom, however, are also artisans. For this not-well-off class the main rule is that only unmarried, vigorous, young men and women should immigrate. On arrival, if such young men, if they are not artisans or cannot find any work as artisans, immediately take work as day-laborers in the country or in street building, and if the young women hire themselves out as servants, in this way they at least can earn their keep. After they have learned the language and work habits, they can quickly earn something, and if they combine thrift with industry, prepare for themselves a better future. Should they wish, as good children, to provide assistance to the aging parents they left behind, they can support them from here, or they can also, if they prefer, bring their parents over here. Human kindness demands, though, that old and poor folk, or sickly persons, and also poor families, be advised against immigrating. Whoever cannot make himself useful by working in this country is rejected by this strange world, and a sad, often despairing situation awaits him. Often it happens that the father and provider of a poor family, through worry or the unaccustomed climate, falls into the sick-bed or even into the grave, and then the lot of the wife and minor children left behind in a totally strange part of the world is truly awful.

We advise all immigrants, each family for itself, to sign a binding written contract with the captain of the boat on which they come over, in which the captain promises to provide adequate heat and water for cooking their food, as well as adequate water for drinking. They should contract for *one gallon of fresh water* per person per day. Further, the contract should include the hospital tax to be paid here or whatever other government taxes pertain. Finally, they should so arrange their departure that they arrive here in the best time of year, which is to say, they should board ship on the other side not earlier than the beginning of March and not later than the end of July. If they arrive here shortly before or during winter, their lot is always, in every respect, worse.

We warn the same also against all disputes on board the ship, especially with the ship's personnel or, worst of all, with the captain or mate. Regarding the latter, they should always cooperate with the greatest care and with the greatest respect. If they believe they have good reason for complaint, they should bring it up with humility with the captain. Should they believe they have been injured by the captain himself during the crossing, it would be best to wait until arrival in port before attempting to complain and seek justice, because, as regards the law, on board ship the captain has executive power; but for the misuse of such power he is answerable at the conclusion of the trip.

We conclude these words to our countrymen with the heartfelt wish that no one should consider immigrating who is not determined and capable of earning the love and respect of the citizens of this country by means of an occupation and proper moral conduct. Without this he should not trust in a contented future. There are already too many idlers and revelers here. Their lot here, as everywhere, is to be despised and miserable. The poor performance of a stranger always arouses more notice and results not only in a sure punishment, but in addition brings shame and disgrace on the [German] people of which he is part.

> Signed: Philip Hone, President. Caspar Meier, Vice President, also Consul for the Free Hanse City Bremen. C.W. Faber, Financial Administrator, also Consul for Kurhesse. George Meyer, Secretary. [Directors] George Arcularius, David Lydig, Jacob Lorillard, J.W. Schmidt, Consul for Prussia and the Free Hanse City Hamburg. D.B. Dash, Charles Graebe, F.S. Schlesinger,

### Overview of Trip Costs, etc.

After gathering information from a wide variety of sources we believe we can recommend the following guidelines for calculating travel costs.

Travel Costs in Germany, by foot or goods-wagon, including meals:

Adults, each ¼ Taler Pr. Ct. [per hundred-weight] per mile.

Children, each ¼ " " " " "

From the *French Border* to *Havre*, including meals, 50 Francs for adults, 35 Francs for children.

For passage from *Havre* adults pay 80 to 150 Francs per person, without board, half of that for children under 10 years of age.

The packet boats normally charge the highest price, but they are also the best, and passengers generally are treated best there.

The purchase of foodstuffs requires approximately 40 Francs per person, both for children and adults.

The passage from *Bremen* or *Hamburg* usually is contracted to include provisions, etc. and costs approximately 30 to 40 Spanish Taler.

For those immigrants using these ports we recommend the German vehicles that regularly travel there, making a point to arrange for the ordinary rate [of service].

List of Items to Bring.

Immigrants would do well to supply themselves with:

Woolen clothing for one year.

*Linen* and *Underwear*, depending on what your means allow, a full outfit. *Wom-en's clothing*, only for the trip and a few months' stay here, because the styles here are entirely different from there.

Shoes and Boots, a good supply.

From all you have with you, you should wear the old and the poor on the trip, especially at sea, at the same time being as cleanly as possible in changing underwear, because it contributes to healthfulness.

As for *Bedding* and *Pillows*, generally you should only take whatever is necessary for the trip.

*Bedsteads*, as well as all *Furniture*, *Carts*, *Agricultural Implements*, and *Work Tools*, should not be brought here, since transport is expensive and the trip difficult; also, once a family has finally settled in, everything can be procured here just as easily, and often it will be more appropriate to the land and one's trade.

List of Foodstuffs to Lay In.

80 pounds salted meat of oxen.
100 pounds hard bread or hardtack.
2 bushels of potatoes.
25 pounds of rice.
25 pounds of flour.
1 bushel of peas or beans.
20 pounds of sugar.
1 pound of tea.
3-4 pounds of coffee.

If conditions allow it, you can lay in some fresh meat and vegetables for the first few days [of the trip], as well as wine and similar drinks, depending on your ability to do so, although in this regard moderation and economy are to be recommended.

The above rations are per person, and are valid for adults and children; for at times on board vehicles children even eat more. For a family of 8 persons, on the other hand, 6 rations will be sufficient.

Immigrants would do best, in France, for several together to purchase in quantities that allow them to enjoy the benefit of reduced prices.

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### M A N U S C R I P T S

(The New-York Historical Society)

Account book of Garret Green and George Green Diary of Philip Hone Diary of George Templeton Strong

### NEWSPAPERS AND JOURNALS

(The New-York Historical Society)

American Musical Journal The Evening Post Journal of the Franklin Institute The Man National Trades' Union New York Commercial Advertiser New-York Mirror New York Sun New York Sun New York Transcript Shipping and Commercial List, and New-York Price Current



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THE

## MEW-YORE

# BOOK OF PRICES,

FOR

## MANUFACTURING

## PIANO~FORTES.

### BY THE SOCIETY.

"He that loveth right, loveth his neighbour."—Mazim M. F.

NEW-YORK:

PRINTED FOR THE SOCIETY.

1835,



## PREFACE.

THE social principle of man, reasonably exercised for any laudable object, must be for his individual and social advantage, whether on a large or small scale.-This principle is generally acknowledged; and in these United States it is claimed as the birthright of every individual, to associate for all honourable and lawful pur-The Journeymen Piano-forte Makers, of the City poses. of New-York, believed it necessary and expedient to form themselves into a Society, for the better regulating and equalizing their prices. The Society have, after much labour and expense, completed their Book of Prices, which will, they trust, be found as correct as the nature of the work would admit of, it being the first publication of the kind ever printed in the United States. The Society, therefore, now present to the Trade in general, the following Book of Prices, hoping that, (however imperfect it may be found,) it will operate to the mutual advantage of both the Employer and the Employed-an object to which the attention of the Society has been most scrupulously directed.

## GENERAL EXPLANATIONS.

WITH the following Prices, the Employers are to furnish all lathes, thick and thin circular saws, and other fixtures belonging to them, and all other articles, fixtures, and machinery now furnished by them.

Journeymen are to furnish their own candle-light.

As a general rule, all men are required to work by the piece; but in some cases it will be found impossible so to do, viz. as in parts of Fly Finishing, &c.; and in such cases no man is to work more than ten hours for a day's work, and when working by the day to be paid according to his earnings by the piece.

It is particularly recommended, that all concerned in the Prices will make themselves acquainted with the preambles of the start prices, that it may be well known what the extras or deductions are; and in charging for extras, and extra sizes of any work, whether by the foot, inch, or a lesser size, to be as follows, viz. When it is a fraction under half the given extra size, nothing is to be charged; when half the given extra size, the half is to be charged; and when above half the given extra size, the whole is to be charged.

The Society cannot approve of the very imperfect manner in which the annexed Engravings have been executed; but as it was imperatively necessary to have the Book of Prices completed immediately, they have been reluctantly adopted.

*Note.*—The price of new work now in progress, and the price of other extras, or new work as it may occur, will be forthcoming when arranged.

## BOOK OF PRECES.

### A SQUARE HORIZONTAL PIANO-FORTE CASE.

Five feet six inches long, and two feet wide, inside the rim. The rim eight inches deep on the outside. The cheeks square, the name-board straight, and fitted. A slip in the opening on the bottom, and the lock-board fitted. The back two inches thick or under, and lap-dovetailed into the ends. The bottom three and a half inches thick or under, (including doubling on the upper side) projecting from the rim or flush with ditto, the front and ends banded. The front and end of rim, and front of lock-board, the cheeks, and name-board veneered. The front veneers to lap at the cor-The ends of opening, and edge of rim, ners. back, cheeks, and name-board banded. The venedr linings two and a half inches wide, rabbeted in flush, or glued on. One straight and one angle right-hand blocks, (the blocks from three to four inches wide on the top of ditto,) meeting together on a metre at the end, and fitted to the back, the blocks to be of pine and hard wood glued on ditto in one joint; the blocks rabbeted, or a lining of pine to form ditto, and a lining on front and A cross-block on right-hand of bottom, cheek. four inches wide, two inches thick or under. One long pine block cut straight at the treble end, or

1

with a short tapered block at the treble end, one joint in ditto blocks, and glued on the bottom. One long hard wood block and pine glued on ditto in one joint, the block seven and a half inches wide, or under, at the base end, the top of ditto veneered cross ways, and made to butt against the angle block. A skeleton, or solid block, at the left end of case. A solid top with \$12 00 square edge, and one joint in ditto Each, inch less in length, or width, or half inch in depth of rim, to five feet three inches long, and one foot ten inches wide, and seven inches in depth of rim, deduct Each extra inch in length, or width, or half inch in depth of rim, to five feet nine inches long, and dealed two feet three inches wide, or half inch in depth of rim, to ten inches deep all perimperature with 1,0 20 Ditto, ditto, above five feet nine inches long, and but two feet three inches wide, or half inch above them ten inches in depth of rim woh-(eff lines and eff he-1 0.40 Each extra eighth of an inch in thickness of bottom 0 9 Each extra quarter of an inch in thickness of back -05Making the rim of cherry, ash, or mahogany, extra 0 50 When the rim is made of maple, extra - holded when 1 00 Making the upper dovetail of the rim lower than the edge of ditto, that the band on the edge of rim C Y may cross the joint him rains to this the -. 0 .7 Mitre dovetailing the corners of a case, &c. each corner ouddet-olan-bedourllad-s bais own-connel 10 18 When that part of the rim, (the inner rim,) that is 101 within the long lock board, is made separate,  $\frac{1}{2}$ extra roll-opor entitient (, or ib ite got entition- 11, -0 12 Making the inner rim lower than the outer ditto . .... · **()** 4 Fitting ditto rim over right-hand block - (1999 -4 0 Fitting dittorim to a canted, round, or hollow corner 7 0 When the front slip, to receive a moulding, is fitted to the inner rim the d-their do-thold-store-the 9 U Rabbeting, or grooving for key slip and oblive the -0 8 When the linings in the start are made of hard wood, dia. each extra 0 5

Each lining to support a back corner fret, two identity inches deep or under the and the abby webers, and \$0" 3 Ditto, when the depth of the block 6 Making a short lining between angle and long block 0 9 When ditto is made of hard wood, extra that other to 4 Making a piece on cross block, or bottom, against the long block, lining, or the back as a small bracket show hard without shis basis or cus on 10 6 Lap dovetailing the front corners of the case, extra from cutting the dovetails through, each corner -600 6 Blind lap dovetailing the corners of the case, each active corner is a minimum unit. No experts the relation 0 10 Glueing on blocks or pieces to save the corners, &c. when varnishing; the blocks, four inches long or under, each block bereiten kousig berute land and of one Ditto, ditto, above four inches long, each block Screwing on the above blocks, each ditto extra 32 0 2 Getting out stuff for frets, fitting ditto, &c. see fly Suffinishing. For other extras see tables, &c. Carle The extra time over one half hour in making a mould, in making or mending a straight, or sweep caul, (including clamps or other fixtures,) to be paid for according to time. phare againer add the ecology consistent to death a OF BOTTOMS. - millio , enough Greb extra teaou in the width of pleeds When the doubling to the right of cross block is  $\Gamma^{(1)}$ taken away to receive the right-hand, or angle blocks, &c. or rabbeted in one linch or less effected 0 25 009 Cutting a hole through the bottom and the side of left-hand block, or lining, the ends of the hole left round from the bit, and the block or lining from ,걸고 화가 입국. 0 12 the saw -When ditto is cut square, or one end is bevelling -When ditto is cut after the block is glued in -0.18 0 30 When any of the above holes are cut smooth and 06 **.** .. filed up, extra -. . MI INGA When a bottom is made on a sweep, over a six-0 20 teenth, to one-eighth and a sixteenth of an inch -

Doubling the bottom on the under side
When the under side of bottom is thickened upon
the front back and ends with nine one inch
thick six inches wide or under the the the the
When ditte nine is from one to two inches thick 0.60
When the shows misses are matual at the company
when the above pieces are metred at the corners,
when the above pieces are made of hard wood, or
for extra width of ditto, see table of glueing up
Stull. 小量操作 建强化 建聚物 建固定的 法公司的 法公司的 法公司
When a bottom is made hollowing between the
doublings, with pieces of pine from six to eight
nches wide, glued at the back and front edges,
one piece at each end fitted between the long
pieces, and three pieces in the middle across the
bottom 60 62
When the pieces under the bottom, in the thickening
up, or between the doublings on the edges and
ends, are made of hard wood, to be extra - 0 25
When the pieces between the doublings are mitred.
at the corners, each mitre
Each extra cross piece on or in the bottom, butted
between 0 19
Framing the above pieces at the corners with single
tenons. extra 0.26
Each extra tenon in the width of pieces
When the bottom in the start is furnished deduct 1.50
Each extra tenon in the thickness of stuff
When tenons are over an inch and an eighth laws
each extra
$\mathbf{F}_{\mathbf{r}} = \mathbf{F}_{\mathbf{r}} + $
Tor other extras, see tables, &c.
OF DACKS.
Supply the edge of a back with three-eighths or half-
men stuil, alter the back is glued in, extra from
price of joint 0 6
Sinking two pieces of hard wood in the edge of
back for screws 0 8
---------------------------------------
Hollowing the edg
Ditto, when includi
Each quarter of an
When an inch back
lap over the bloc
Making a back of c
When a back is fur
ash, or mahogar
hard wood back
Thickening up and
Ditto ditto mith ~
Making a back of r
When a back is fur
If more than six m
the rim, to be pa
Each pin through 1
Each ditto, when
wards
Covering the heads
tom each
Each wedge in ditt
Veneering the bac
double the price
The price of joints
veneer joints.
The moonshine of
to be charged a
shop think it is w
When a back is fur
be thickened up,
hooks This and
getting out the h
gering out the D
· · · · · · · · · · · · · · · · · · ·

# OF BRACES AND BELLY BRACKET.

Maling a broad on around blook fitted against the	•	• •
Making a brace on cross block, inter against the	øn	10
ends of long blocks, of the back, &c.	φU	10
Each brace in right-hand end of case, of two-flich		
pine, fifteen inches long, or under, or hard wood		10
of inch stuff	0	12
When ditto is made of hard wood plank, extra	0	6
Every two inches extra length of brace	: 0	1
Letting the end of a brace into the block or lining,		
extra	0	3
When the edge of a brace is let into the bottom,	-f., i i i i	
extra	- 0	5
Each pin in a brace	0	4
Each wedge at the end of a brace we have a second at the second at	<b>0</b>	9
Making a brace to lap on the cross block, with or	î de je	
without a nail through, ditto	0	-3
Making a belly block or bracket, fitted through pine	é dite.	
block to the back, and letting ditto into the bot-		
tom or fixing ditto with a pin through the bottom	. 0	28
When ditto bracket is not let through to the back	ŏ	25
For voncering bracket son table of ditta No A	Ŭ	20
When a brace long on the grace block and the end		
of brees bevelled for a moders, the long to be only	0	G
of brace beveneu for a wedge, the tap to be only		20
OF BLOCKS IN THE CASE	•	
UF BLOUKS IN THE CASE.	• • •	÷
117 hon the right hand blash former a next of the size		
when the right-hand block forms a part of the rim,		40
	: U	12
Extending right-hand block to the back -	0	6
Letting ditto into the back, extra	0	6
Letting ditto into the front	• 0	9
Letting angle block into the back	0	10
Each extra inch in width of an angle block, above		
four inches wide	0	6
Letting the ends of cross block into the long pine		
block	0	3
Making a block, two inches thick or under with		
hard wood glued on ditto, fitted between the right		
and a strong million both con the right		

7
hand block, or angle block, and butted against the long block, glued to the back, or rabbet in ditto, or with a lining of pine; the top of the block not to be veneered
end 0 6 Each extra inch in width of long block, for the ma- king to nine and a half 0 3 Ditto above nine and a half inches wide at the base end, for the making 0 6 Each wedge at the base end of long blocks, when ditto is glued together, before they are glued in 0 8 Wedges, when the above block is glued in sepa-
rately, not to be charged. Preparing a long bridge to its width and thickness, and glueing ditto on the veneer of long block - 0 25 Rabbeting away the veneer for ditto bridge, when the edge is straight, extra - 0 6 Ditto, ditto, when the veneer is sweeped, or with crooks - 0 11 Shaping the front edge of long block a faint sweep, or with one crook - 0 12

Ditto, when with two crooks, extra -	- \$	\$0	-5
Shaping the long bridge on block to match ditte	ͻ, ີ		
extra each edge	-	0	<b>4</b>
Ditto, when with two crooks, each edge, -	• /	0	5
Shaping the edge of long block an ogee,	-	0	18
Ditto, the long bridge ogee, to match ditto, extr	a	2 <b>*</b>	
each edge	-	0	6
Shaping the long pine block ogee,	-	0	12
Rabbeting the edge of long pine block in about ha	lf	•	
its thickness, tapering to two and a half inche	s		
deep, or less, and stopped at the treble end of bloc	k	0	18
When the long block in the start is not made, deduc	:t	0	50
When without the angle block in the start, deduct		0	50
When without the cross block in the start, deduct		0	12
When only a lining of inch and quarter pine, at th	e		
right hand of case, for block in the start, deduc	:t	0	18
Deduct for lining, or rabbet, on angle block, o	$\mathbf{r}$		
block against the back		0	7
When the top of angle block is hollowed out, extra	ι,	0	6
when any of the blocks in the start are made without	it :	-	
a veneer on top of ditto, deduct by the table of	of		
For more on loss is in black and the			
<b>R</b> of more of less joints in blocks, see tables of ditte	).		
Rabbelling the felt end block about inch and quarte	r		
square to receive the sounding board, and th	е		~
When the right hand on and 11 1	-	0	3
into the bettern each blacks are rabbeted	t	~	
When the odge of long bridge is also by the	-	0	12
long block ditto not to be shared with the	e		
iong block, ditto, not to be charged.			
OF NAME POADDS			
OF NAME BOARDS.	t.		
Name Board, No. 1.			
Making the name hand a li			

Making the name board a plain sweep, or a faint elliptic sweep in the whole length; or a plain, or faint elliptic sweep at the ends, and straight in the middle; the back straight the whole length, extra from start

0 62

When ditto is made a quirk, or elliptic sweep at th	e €{}		
ends, extra	- \$0		2
Snaping the back to the front of plain, or faint ellip		g sint E in Mil	2
Ditto the back of a quirk or elliptic sweep of the	- U	2 <b>1</b> 35	3
ends	្លា	1	ຮ່
× Sliping the edge of a sweep name-board, with hard		n de la comunicación de la comunica El comunicación de la comunicación d	U
wood; when two or more are glued in the piece			
and cut with the name-board, each -	- 0	1.1	6
Ditto on the edge of sweep name-board, when ditt	o∛ ∉	11	
is straight on the back	- 0	) 1	2
Ditto, when name-board is sweeped on the back	,		
back edge of slip straight	- 1	. 1	8
when the slip is made to form a fillet, on the swee	p r		ß
Glueing a separate fillet on a sween back of name			U
hoard	- 0	) 1	2
When the above slip is made in three pieces, th	e	•	
middle piece glued under to form a break, or fo	r	8.2	:
forming a hollow on the edge, extra from hollow	-	Ċ,	
ing	- 0	)	6
Sinking and glueing a piece of hard wood on the edg	e		~
of name board at the ends of ditto to lap the cheek	s U J	)	8
Sliping the edge of straight name-board, with har	u : n		8
Making ditto to form a fillet on the back extra	្លាំ		3
The above quirk, or elliptic sweep at the ends	of		2
name-board, is when the curve is three-eighths	of		
an inch deep or more from a straight line from th	e		-
front corner, to a point seven inches from the end	t.		
Hollowing or scalloping the edge of name-board	ł, i	•	
when the slip is one inch wide or under, includin	g,		
the band	- (		2
Ditto when over one, to two inches wide, includin	5		18
The Danu	- 0 7	/ /	.0
and veneering ditto when straight two feet lon	• <b>&gt;</b>		•
or under one inch thick the ends of hollow	⊃ ¥		
square, including the hand	0	2	28

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그는 것 같은 것 같		
Ditto, ditto, over one, to two inches thick, including	<b>#</b> 0	0.0
When the above hollow in the edge is worked in the	<b>\$</b> 0	37
scalloped edge of name-board, including the sweep		-
at each end of scallop, extra - 1999 - 20 - 1999 -	0	16
name-board- in the straight of faint sweep		aseter,
Mitreing the upper edge of name-board to the cheeks.		
: extra	0	8
Ditto, when the ends of name-board are mitred in	· 2,	1993 -
the grooves to the depth of name-board	0	24
Each hole cut in a name board, without a rabbet -	. 0	5
Each ditto cut in the veneer to form a rabbet, extra	0	4
Quarter-rounding the edge of veneer, each hole	0	2
When the edges of a hole are thickened up on the	4 <u>)</u> (*	
veneer rabbet with veneer, and quarter-rounding		
ditto edges, extra each hole from cutting -	0	9
Lach nole in name-board, cut after ditto is veneered,	~	
and cutting out to form the rabbet afterwards -	0	15
For other extras, see the following name-boards,	•	
Name-Board, No. 2.	4	
Making a name-board elliptic, sweeping round to the		
rim, and keyed up to ditto, about two-thirds of the		
length, straight in the middle, the back shaped to		
follow the front of ditto,	1	38
When a name-board comes to the rim in a bevelled		
groove, extra	0	9
When name-board mitres to the rim with a project-		
ing tongue de - and - de statistique - de s	0	18
Making a veneer lining on the inside of name-board,		
two and a half inches deep or under, extra	0	18
When an elliptic name-board, as above, is made		
straight on the back, deduct	- 0	36
When the above name-board is made a faint sweep	· ·	
In the middle, extra $-22\%$ (-2.2.4 - 2.5.4 -	0	12
Snaping me mudie of the back to the front, a faint		•
	0	6
		~

÷r,

# Name-Board, No. 3.

Making a hollow-cornered name-board, sweeping		
to four inches diameter or under, straight on the		
back, square cheeks of half inch mahogany, keyed		
up to the rim	\$1	14
Making two pieces on the back of elliptic, or sweep	<b>r</b> -	
part of name-board at the ends, the pieces straight		
on the back edge, and bevelled at the ends to hold		-
the frets, about four inches long, and one inch wide	0	12
Making two pieces about half inch thick, glued on		
the edge at the ends of name board, twelve		
inches long or less, three inches wide or under,	• •	
and ditto sweeped on the edge, hollow, or round	0	25
When ditto pieces are fitted on the back of elliptic or		
sweep part of a name-board, to be extra -	0	12

# Name-Board, No. 4.

Making a hollow-cornered name-board, the hollow part fast to the rim, cheeks, or bottom, the centre or straight part to lift out with tongue and groove 1
For other extras, see the foregoing name-boards, and tables.

# OF SHAPING CORNERS OF CASE.

Rounding the front corners of a case, (the top and bottom to match,) the corners of rim to be of three inches diameter or under, or when the corners are not thickened up in the dove-tailing, the veneer on the rim continued round to the opening in one 2 50 piece Canting the front corners of a case, the cants on the rim three inches wide or under, (the top and bottom to match ditto,) the veneers at the corners of **3** 00 cants to lap -Rounding the front corners of a case, when the corners are above three to six inches diameter, the

1 50

<ul> <li>corners thickened up in the dovetailing, (the top and bottom to match,) the veneer on the rim continued round to the opening in one piece</li> <li>Each extra inch in diameter, of round corners</li> <li>When a separate veneer on the round corners of rim, including the joints on the edges of ditto, extra - Rounding the front corners of the rim, when ditto</li> </ul>	\$3 0 0	00 .5 46
is made of hard wood, or when the end block forms a part of the rim, extra A long lock-board for a square, canted, or round-	0	25
cornered case	1	00
When ditto is made longer than the left end of opening, extra	0	40
When the front corners of a case are made hollow, to be extra from round ditto	0	50
OF TABLETS ON CASE, SHAPING DITTO	0, 8	&c.
A plain veneered tablet, at each end of case on front of rim, eight inches deep, and half inch thick, or	• •	
under, forming a break at the inner edge of ditto,		
the top and bottom to match ditto	3	00
the top and bottom to match ditto extra	0	60
When the veneer on front of tablets is made to show a small break on the outer edge of ditto, the top	Ŭ	00
and bottom to match, extra	0	25
Canting and veneering the cants of tablets, the top		
and bottom to match ditto, extra	2	00
veneering ditto, the top and bottom to match ditto.	•	
extra;	4	00
Making the edges of tablets quarter round, with two	·	
squares to each round, forming a sash-cornered tablet the ditto corners voncored the top and		
bottom to match ditto, extra	6	00
When ditto is made with but one square, all ve-		
neered, and the top and bottom to match ditto,		
extra		s 90

Making an elliptic on the front of tablets, and show-		
ing a square at the edges of ditto, the top and	<b>#</b> 0	٨r
Ditto the front of tablets a plain sweep without a	<b>ð</b> Z	20
square on the edge	1	50
Making the whole tablet elliptic, and ditto veneered.	÷.,	00
the top and bottom to match ditto,	2	50
When the plain sweep front of tablets show a		-
square on the edges of ditto, extra	0	50
Making a long lock-board when with tablets, extra		~ ~
When ditto is made longer than left and of opening	0	50
extra	0	10
The above shaping the tablets, is extra from plain	, v	•±()
veneered tablets. State of tables He table values tablets		11.
For crotch veneering and rim, and tablets, and other		•
extras, see tables, &c.	7.4 .	
When the inside of the rim at the tablets is made	• •••	
hollow, a plain, or elliptic sweep, the veneer		00
lining carried round ditto	1	00
bollow corpored tablets a state of the canted, or	1	00
When the veneer lining is carried the above shapes.		00
extra	0	45
A solid half round column, (ditto prepared by the		
turner,) fixed at each corner on front of rim, the		2
top and bottom made to match ditto	2	50
A ditto three-quarter, or entire column, the top and	ing Sec	
bottom made to match ditto	3	75
Making the front corners of a case form a sash cor-		
the ten and bettern to match ditte	5	50
For long lock-board see price of ditto for square		00
case. &c.	-	

X

# OF BLOCKS UNDER THE CASE, FOR DRAWERS, PILLARS, &c.

Making and glueing a pair of blocks, under the square-cornered case, to receive the legs, &c.

	14		
	four inches wide, three inches thick or under, one joint in ditto, the front and outside veneered -	\$1	00
	Each extra inch in width of blocks, or half inch in thickness of ditto	0	12
	stump at the front and back ends of ditto	0	6
-	When ditto veneer, or the veneer on front ends of blocks is let in on the bottom, or when ditto		
- 1	crosses the bottom, each - 1990 - 1990 - 1990 - 1990 -	: 0	10
	inches square or under, one joint in ditto, the	•	<b>.</b>
-	front ends veneered	0	80
	of blocks	0	8
'	Tapering the front ends of blocks, and a rabbet in	0	
•	Boring and tapping blocks, or the bottom, to receive	. 0	- <b>4</b>
	legs, each hole line - star - star - star - star	. 0	5
]	Making blocks to match canted or round-cornered		
	piece, the veneer on cants to lap, extra	·0	50
1	When the front ends of blocks, under the case, are		
•	made to match the break on the outer edge of	0	16
j	Making blocks to match elliptic tablets, or canted-		10
-	cornered ditto - the - the - the - the - the - the -	. 0	60
l	Making the blocks under the case to match the bollow-cornered tablets	1	.) 60
]	Making ditto blocks, to match the elliptic on front		
	of tablets, showing the square at the edges of		
Ī	Making a small bracket, fixed in the corner of block	. 0	50
-	and bottom, ditto veneered, and scallopped a hol-	× .	· · · ·
r	low on the edge, each	0	11
ľ	When allo is made with two small scrolls, each -	0	16
-	round columns	0	40
I	laking blocks to match the bottom, with three-		
	quarter, or entire columns with two breaks, or stops to each block	0	89
	work to prove store " star " and " chine" star " to the		04

# Making and sinking a piece of hard wood into the lower ends of columns and into the bottom, for a

nut to receive the leg, each piece - - - 0 25 When the front ends of blocks under the case are made sash-cornered, to match the sash-cornered case, and all veneered as the case - - 0 72

# OF DRAWERS.

Making two square drawers, twelve inches long, and sixteen inches wide or under, the front ve-		
neered	1	25
Making drawer fronts a plain sweep, the inside		
straight, extra	0	36
Making ditto fronts elliptic sweep, the inside straight,	5	
extra	0	60
Shaping the inside of drawer fronts to match the	•••	
outside	0	36
Extending the drawer fronts six inches, or under, to	÷.•	
form a wing or other carving, and a rabbet slip to		
guide the drawers, extra	0	56
When one end of drawer fronts is made to fall back,		-
to follow the sweep of a centre drawer, extra 🚽	0	20
Each straight sham drawer front	0	16
Sweeping ditto front, a plain sweep, each extra	0	15
Sweeping sham front elliptic, each	0	<b>25</b>
When drawer fronts are made for carving, deduct		
the veneer by the table of ditto.		
Making a straight centre drawer	0	75
Making centre drawer front a plain sweep, extra,		
(inside straight)	0	18
Making ditto front elliptic, the inside straight -	0	37
Shaping the inside of drawer front to match the		
outside	0	18
Making a straight sham front in the centre, inch and		~ 1
half thick or under, and ditto veneered	0	21
When ditto is made a plain sweep, extra	0	18
When ditto is made an elliptic sweep, extra -	U	30
Making and fixing pieces behind the end drawers	· •	00
at the back	U	30

3

# OF EXTRA TOPS.

Making a square extra top, five feet eight and a half		
inches long, and two feet three and a half inches		
wide, with one joint in ditto, and square on the		
edge	1	67
Each inch less in length or width, deduct	0	11/2
Each extra inch in length or width	0	$2\overline{\frac{1}{2}}$
Canting the corners of a tap, each cant	0	$ ilde{2}$
Each round corner of a tap	0	3
Each hollow corner of a tap	0	6
Cutting out the tap in the centre, to match the		• •
square tablets, (or when ditto tablets are canted,		
&c.) or jointing pieces on to form ditto -	0	16
For other extras, see tables.		
A tongue and two mortices in a joint, extra from flat		
joint - for a sector bing a sector - sector	<b>`</b> 0	5
A dovetail piece let in a tap, to cross a joint or crack	0	6
A pin in the edge of a tap, four inches long or under.	-	
to cross a joint or crack	0	:4

# OF PLINTHS.

# Plinth, No. 1.

An open or stretcher plinth, as in plate, No. 4, figure 1, five feet eight inches long, or under, and the ends two feet three inches from back to front; the ends and stretcher to be six inches wide, and three inches thick or under, glued up in two thicknesses of pine; the stretcher to be framed into the ends with single tenons, or dovetailed; the top of the ends and stretcher veneered, and the edges banded with shaded mahogany

- 3.25

17	
Each extra inch in length of plinth, over the ends - \$0 2 Ditto ditto in length of the ends 0 3	
Each extra inch in width of stretcher, or the ends	
Each extra quarter of an inch in thickness of plinth 0 10	:
Tapering the ends of stretcher from near the centre,	
each taper0 6 Ditto the ends from the stretcher, each taper when	
Each quarter of an inch in thickness of plinth, extra	-
in tapering $      0\frac{1}{2}$	•
inches thick or under	
Each extra quarter of an inch in thickness of plinth	
of tapering, with a break, extra	L
Each extra tenon, over two inches at each end, in width of stretcher	,
Each extra tenon and mortice at each end, in the	ł
thickness of ditto	3
When tenons are made longer than inch and a quar-	
A plain veneered tablet on front of stretcher over	L
the pedal foot	3
When ditto are made on a sweep, extra 0	3
Width of stretcher not to be measured over a tablet	
When a block ten inches square or under is formed	
on the ends of stretcher, three inches thick or	
under, glued up in two thicknesses of pine, ve-	-
neered on the top, and banded on the edge, deduct	-
from the start $0.30$	)
Each extra men in length or which of blocks $  0^{-2}$	2
and stretcher 0	9
For shaping blocks or stretcher, see table of sweep-	-
ing plinths, &c. and for other extras, see tables.	
when the stretcher, or centre part of plinth, is fixed	
the tongues endways, to be the same as the start.	
3	

#### Plinth, No. 2.

A plinth five feet eight inches long, or under, and one foot three inches wide, three inches thick, or under, framed with single tenons, or dovetailed, four braces across the frame, and a top glued on the frame, the back edge straight; the front pieces to project in front one foot or less, to receive the columns, &c.; the top veneered, and the front and ends banded with shaded wood. See plate No. 4, \$5 0 figure 2. Each extra inch in length or width 6 Ø Each extra tenon over one in the width, at the end of each piece in framing 0 4 Each extra tenon in the thickness of the framing 0 8 Each quarter of an inch in thickness of plinth 0 12 0 12 Each extra brace in framing of plinth 14 Ditto when it is made of hard wood Each angle brace tenoned, fitted, and pinned, or dovetailed the private south and the first 0 14 When the frame is made of hard wood, to be extra . 1 When tenons are made longer than inch and quar-- - -ୁ ମନ୍ଦ୍ର ଶ୍ରହାନକୁ । 😳 ter, extra éach 👘 1 40 When the back of plinth in the start is made the same as the front of ditto, (including banding,) to 0 35 be extra When the plinth in the start is not framed, and ditto 78 S is glued up in two thicknesses of pine, deduct 0 75 For extra thickening up of stuff, see table for ditto, No. 3. And ogto out to considered address to be 355 For shaping or sweeping the edge of plinth, see และสำคัญส่วนรับน tables, No. 15. For crotch band, veneering with ditto, see tables, Nos. 6 and 4. Dovetailing a piece through the front of plinth, to fix a lyre to, that ditto lyre may be portable - -0 18 For making lyres, pedal feet, &c. under a case, Robert AW & South Offi see tables, Nos. 17 and 18. When the end pieces to project in front are framed

across the ends of a solid centre part, the tenons

to be charged for as above. When with double grooves, and tongues endways, to be the same as four single tenons at each end. For trusses; or other standards under a case, see table, No. 16.

# OF SCROLL FEET.

Making a scroll foot on a plinth, or block, that rounds		
short, as in plate, No. 5, figure 8, veneered on		
the sides, the top veneer to come to near the		
floor, each	0	59
When the under side is made a faint sweep, as in	ainti Sanan	
plate, No 5, figure 9, extra	0	9
Veneering ditto faint sweep, extra	0	9
Each scroll foot formed on a plinth, or block, rising		Ę.
above ditto with a hollow, or abrupt as dotted	(41) ()	
line in plate, No. 5, figure 10, the under side	n eu	£
shaped to follow the top sweep, the sides ve-		,
neered, and tap ditto to come near the floor	0	80
When a foot begins with a hollow on the upper side,	t iz in ti i y i	• •
falling below the top, as in plate, No. 5, figure	n an	
11, extra	0	12
Tapering a scroll foot on both sides, each foot extra	0	24
When a foot is made hollow on both sides, or fol-	7/14	
lowing a sweep on the plinth, &c. each foot extra	. 0	36
When the top veneer is carried all round the scroll,	с. 1. Е	
extra	0	10
When the sweep on the under side of scroll foot is		
veneered, extra	.0	12
Glueing a piece of mahogany on the bottom of scroll		•
feet, each piece	0	6
When a scroll foot is made separate, and dovetailed	• ; • ] ;	
- into plinth or block, to be the same as the start.		
For stump feet, see table, No. 12. Veneering ditto,	1.1	
see table, No. 11.	: ! ! · !	
For other extras, see the tables, &c.	· · · ·	
For extra joints in glueing up feet over three joints,	:	
see tables, Nos. 2 or 3, for glueing up stuff.		

The extra time over one half hour in making a mould, or a caul and fixtures, to be paid for according to time.

# A SQUARE HORIZONTAL GERMAN GRAND ACTION PIANO-FORTE CASE.

Five feet six inches long, and two feet four inches wide inside of the rim, the rim nine inches deep outside; the lock-board fitted, and a slip under ditto, on the bottom. The back one inch thick, or under, and lap dovetailed into the ends. The bottom two and three-quarter inches thick, or under, (including doubling on the upper side) projecting from the rim, the front and ends banded. The front and ends of rim, the lock-board, cheeks, and front of rest pin (or long) block veneered, the front veneers to lap the end veneers. The ends of opening, and edge of rim banded. The veneer linings two and a half inches deep.  $\mathbf{T}$ wo straight blocks and one ditto between, at right hand end of case, five inches deep, and three inches thick or under, one joint in each. The left-hand block extending to the back six and a half inches wide, and five inches deep, or under, two joints in ditto. A lining two inches thick, and five inches deep, or under, fitted between right and left-hand blocks, and ditto glued on the bottom and against the back. A long brace in front of ditto, two inches thick, and five inches deep, or under, fitted between the above blocks, and glued on the bottom, a short brace between ditto, and back lining. A hard wood piece on top of straight, and angle right-hand blocks, to receive the hitch-pins, and forming a rabbet for board. The rest-pin block twelve inches wide at the left end, and sunk in the left-hand block, and butting against the angle block, and glued up or veneered on the under side, the top side veneered cross ways. A top piece on ditto block, and filling

square horizontal case. For crotch veneering, bandings, mouldings, &c. see

tables.

#### OF FLY FINISHING.

Sawing two frets in a name-board, with plain cross		
🗠 or angle bars, without dots	1	25
Ditto, when with dots in the cross of bars, or with		
three-quarter circles cut in the corners of cross-		· •
ings of bars, extra	0	50
Making a piece for a book-rest, scalloped ogee at	· • • ,	
the ends, and rounded on the edge, when less	1	
than twelve at a time, each	0	12
Making the above rest, when over twelve at a time,		
each	0	7
Fixing the above rest to its place, with screws, each	0	<b>3</b>
Making a book desk of four pieces, half inch wide,	'	
the ends of ditto rounded, and a bevelled piece		
veneered on the top, the ends of piece quarter-		
rounded, to fix at the back of name-board, the		4
desk to swivel with screws, or rivets, when less	'	
than twelve at a time, each	0	30
When the rivets are made flush, extra	0	6
Making the above desk, when over twelve at a time,		
each	• 0	25
Fixing the above desk to name-board, or cabinet	~	
fall, with screws	0	3
Making a desk of six pieces, four of ditto half inch		
wide, the ends rounded, the edge and flat of the		
two lower pieces glued together, the edges		
rounded, and the back corner champhered off, to		
swivel with screws or rivets, when less than	0	07
twelve at a time, each	U	37
* Under the head Extra Tops, when "tap" occurs, read "to	p."	

	When the rivers are made flush, extra	<b>\$</b> 0	9
	Scalloning ogee, the ends of lower flat-piece -	0	4
	Rounding the edge of scalloping, extra	0	3
	For hingeing the above desk, see table, No. 1.		
	Making the above desk, when over twelve at a time,		
	each - come of a star of a star	0	32
	Making a square desk frame, tenoned, half lapped or		
	fingered together with one hat in ditto, half lapped.		
	when less than twelve at a time each •	0	32
	Each extra har in the frame long or cross ways.		
•	tononed or lanned -	0	6
	Making two blocks for the frame to turn in. with	•	
. •	gerow bolog in ditto	Ő	6
	Molting the showe blocks when over six nair at a	v	Ŭ
	time each pair	0	4
f	Scalloning the ends of blocks oree each nair	ŏ	4
	Ditto when over six pair at a time each pair	ŏ	3
-	Ditto when over six pair at a time, each pair,	Ū	U
	<b>F</b> IXing the above desk, on the nont brace, of hame	ี่ ก	6
	Doaru		v
3	Making the above desk, when over twelve at a	់ក	07
	time, each - its means this man on incluing	. 0	21
ł	Sawing out stuff to its proper thickness, or jacking		
	down stuff to a workable thickness, to be extra	N	6
	each irame	· · ·	0
	When any of the above desks, &c. are made of rose,		
	or similar hard wood, to be extra, one quarter.		
	Getting out stuff for two back corner frets, and	1	
ć	planing up ditto, when six pair or less at a time,	, ,	
	each pair		0
	Ditto, when over six pair at a time, to be each pair	r U	
	Fitting in and cleaning up two back corner frets	· (	10
	Fixing the above frets, with three screws in each	- (	) 6
	Getting out stuff for two front frets, and planing	5.	
	up ditto, when six pair or less at a time -	- C	) 7
	Ditto, when over six pair at a time, each pair	- (	) 5
-	Fitting in two front frets, and cleaning up ditto for	r	
	square case	- 0	12
-	Fitting ditto frets to canted or round-cornered case	,	
	extra	0	6

• •

Ditto to the elliptic, or sweep part of name-board,		
extra	<b>\$</b> 0	8
rim at the inside of the tablets	0	8
Fixing the small blocks to keep the frets in, making	· · ,	0
and fixing the fillet to form the rabbet for frets to		
rest on	0	9
Two pieces fitted and fixed at the end of sweep		
part of name-board, to secure the frets to ditto	0	8
in their place at per set four to a set		al an
When ditto blocks are made by the dozen set at	U	- <b>4</b> -
per set	0	2
Boring and tapping the bottom, or blocks for legs,	Ĩ.	
each leg, &c.	0	5
Cutting the screw on legs, &c. each		3
Fixing leg blocks on the bottom after ditto is var-		-
nisned, each	• • 0	31
Making a leg block for a nedal log from when four		
or less at a time, each	<b>•</b>	5
Ditto, when over four blocks at a time -	0	3
Fixing pedal block to its place, each a start frage	··. Ŏ	4
Boring and tapping pedal blocks, each -	Õ	5
Squaring lowerend of pedal leg, and fixing pedal	t i	
foot to ditto	0	13
Making a pedal rod, when six or less at a time,		1
each	0	6
Eitting and fiving a podel red to its place	0	41
Easing a name-board and marking the sharps by	U	: <b>D</b>
ditto for cutting	0	6
Cutting off the sharps, at per set	ŏ	12
Staining sharps, at per set, see key bill.		5
Planing name-board to its proper width -	0	6
Glueing cloth, or leather, on lower edge of name-		;
board, one thickness	0	3
Ditto, ditto, ditto, of two thicknesses	0	6
Fitting and fixing two brass, or other frets, in name-	~	
board with blocks, and silk or paper on ditto	0	12

nished -	<b>\$</b> 0	6
Making a shade, one joint in ditto, an opening for dampers, one end scalloped, a finger hole at the	•	
other end, two battens screwed on the under side, when twelve or less at a time, each -	0	50
Making a shade as above, when over twerve at a	. 0	40
time, each and brodding the blocks under ditto	Ő	6
Making four blocks for supporting a shade, when		
four sets or less at a time, four to a set, each set	0	3
Ditto, when over four sets at a time, each set Scalloping the side of a block (for the shade,) and a	0	2
rabbet on the top of ditto, when eight or less at a	0	
time, each block		ວ ດ
Ditto, when over eight at a time, each	U	- 4
blocks for ditto, the ends of blocks tapered, and screw holes in ditto, when eight or less at a time,		· · ·
each,	:0	10
Ditto, when over eight levers at a time, each	0	8
Making the above lever without the blocks, deduct	0	5
Scalloping the ends of blocks ogee, each pair extra	0	2
Fixing the above lever, flat on the bottom	0	12
Ditto, when the lever is sunk in the bottom, extra Ditto, when the blocks of lever are sunk in the	0	E
bottom, extra sed - and - a set	0	6
Making a straight or tapered L or T lever, with two blocks for ditto, the ends of blocks tapered, and		•
screw holes in ditto, when eight or less at a time,		. • • . •
each - each and a start dura dail - Section -	0	13
Ditto, when over eight levers at a time, each	0	1
Fixing the L or T lever flat on the bottom	0	(
For sinking the above lever, blocks, &c. see above.		
Making a pair of key-blocks, when four pair or less		
at a time, each pair goto - els - o isc- 40 - o to -	0	. 6
Ditto when over four pair at a time, each pair,	0	. 4
rung two key-blocks to a straight, or sweep		10
name-board, the neight of the keys	()	,; Đ

For veneering key-blocks, singly, or otherwise, see		
Making two cheeks (to fix the action on) the whole		
depth of the key-frame, one of ditto glued up,		
and one side of each veneered, or banded on the		
edge, extra	0	19
Making a key-slip of thin stuff, when eight at a time	1	E
or less, each - see - a set, but the prostant state of the	0	G
Ditto, when over eight at a time, each	0	4 Q
Rounding the edge of a key-slip, each extra -	Ų.	0
Getting out a piece of stuil, incli tiller, or under, and	•	,4 E. Seve
working ulito for two key-slips, to be saved apart		n i s N N N
alter being vannsneu, when ten of tess at a time,	0	6
Ditto ditto when above ten at a time, each piece	0	5
Veneering the above piece on two sides, and on the		
edge, when ten or less at a time, each piece -	0	22
Ditto, ditto, when above ten pieces at a time, each	Ŧ	
piece	0	19
Rounding band on the edge of piece to a feather	1	14
edge, see table, No. 10.		
Sawing the piece apart after being varnished, and		
planing up ditto to form two key-slips, when ten		
cuts or less at a time, each cut and two planings,	0	ଁ
Ditto, ditto, when above ten at a time	0	, <i>'</i>
For the price of crotch, &c. as per tables.	t	
Fitting in a key-slip, and fixing ditto on key-frame,	0	; 5
or in a groove	. 0	J
Ditto, ditto, when grooving the cheeks, the ends of	0	10
Sip fitted in ditto	U	14
Ditto, ditto, with three screws, and dovetan	0	o
grooves	U	.0
bawing a key-silp on thick stun, when eight of less	0	5
Ditto ditto when over eight at a time each	Ő	41
Cutting and hinging a top with five hinges when		- 2
four tons or less at a time each	0	68
Ditto ditto when over four to ten tons at a time.		
Ditto, uitto, whom over rour to ten tops ut a timo,	Δ	60
	υ	00

Ditto, when over ten tops at a time, each	\$0	54	
Hinging a top to the case, with two back hinges .	<sup>°</sup> C	18	
Fitting and hinging a short lock-board with three	Ŭ		
hinges	. (	) 28	5
Ditto, ditto, a long lock-board with three hinges .	. č	31	
For castors on legs, &c. or extra hinges, see table.			
No. 1.	'		
Making a stay, or propistick, to support a top, ta	-		
pered, the end rounded, and a hole in ditto, when			
six at a time or less. each	. :(		L
Ditto, ditto, when over six at a time, each			Ż
Fixing a stay, or prop stick, to support a top	. 4	5	)
For mouldings, or other extras, see tables, &c.			
Fixing a pair of trusses (or consoles) between key			
bottom and plinth	, 	0 40	•
Fitting and fixing a brass stay to support a lock.			
board, with a plate at each end, and ditto, let in	<b>`</b>		
flush, and making spiral spring		9 19	2
	- \	- 1×	•

# OF OTHER WORK RECEIVED BY THE CASE-MAKER, TO BE DEDUCTED.

When the stuff for the back, the rim, lock-board, the		
top and all the blocking is cut out to near the size,		
and jacked or roughed over, also the blockings		
and linings, with the long bridge glued up, and		
the long block veneered, the veneers for the rim		
&c. cut out, for each case deduct	1	25
When only the stuff for the back, the rim, lock-board,		
and all the blocking is cut out to near the size,		
and jacked or roughed over, for each case deduct	0	50
When more or less than any of the above, see as		
follows.		
Cutting out a top to near its size, and roughing off		
ditto' - in in in in in in in	·0	12
Ditto, ditto, a long bridge, and jacking off ditto, -	0	3
Ditto the nine linings in the agen	Δ	3

Ditto, the pine linings in the case - - 0 3 Ditto, the cross-block - - 0 2 Ditto, all the veneers for the rim, &c. - 0 11 For glueing up blocks, or veneering ditto, see tables. For other deductions, see the prices of bottoms, blocks, &c.

## A PLAIN SQUARE CABINET PIANO-FORTE CASE OF MAHOGANY, ALL SOLID.

Three feet six inches long, and five feet six inches high; the ends nine inches deep; the cheeks square, one foot three inches long, seven inches wide, tenoned into the ends of case. A straight name-board three inches wide; the inside of cheeks, and name-board, veneered with shaded mahogany. A flat fall and lock-board, with square edge to ditto, and to project over the cheeks. A fast key bottom of pine, two inches thick, or under, framed and panelled; the front edge of ditto slipped with mahogany. The cheeks square-grooved for key-bottom; rest-pin block nine inches wide, three and a half inches thick, of pine, faced with hard wood long way, one veneer on ditto cross way, the block let into the ends square, the lower end of ditto rabbeted for sounding-board, and linings on the inside of ends for ditto board. A straight angle hitchpin-block, five inches wide, three and a half inches thick, or under, of pine, faced with hard wood long way, ditto rabbeted for sounding-board. A bass hitchpin-block, two inches thick, one foot nine inches long or under, the edge rabbeted; six braces of pine, two inches thick or under, the blocks notched a quarter of an inch thick in the edge of ditto. A half-inch pine, or white wood back, nailed or glued on, two hand-holes in ditto. The stiles and rails of the front frames, two and a half inches The top frame to finish with a wide or under. plain square rabbet on inner edge, ditto steadied with three pins. The bottom frame with one panel ploughed in, ditto steadied with two pins. A pine top and bottom to the case, slipped on the edge. A solid top fall square edge to ditto, half inch thick, forming a fillet on top of case -

- 22 50

Each inch less in length, or height, or width of	<b>¢</b> 0	15
Each inch more in length, or height, or width of	$\varphi 0$	10
ends, to three feet nine inches long, and five feet		
nine inches high, to ten inches in width of ends,		
extra - the the test -	0	20
Each inch above three feet nine inches long, and		
five feet nine inches high, and one inch above ten		
in width of ends	0	30
Each inch more than seven in width of cheeks	0	4
Each extra half inch in thickness of cheeks, over	•	
seven-eighths thick	0	4.
Preparing a piece of pine two inches wide, inch		
thick, the edge slipped with manogany, and ditto		
form the ground work for a band or plinth	0	10
For making and glueing on a plinth or mouldings	U	19
or fillets or handing see tables No 9 and re-		
ference to ditto, and No. 7 or No. 6. &c	1	
Preparing two pieces of pine, to project in front one		
foot three inches long, four inches wide, two and		
a half inch thick or under, tenoning or half lapping		
the same into the front edge of case bottom, the		
top side veneered, to form a continuation of ground		
work for a plinth	0	75
When a centre piece is fitted between the above	· · .	
with a tongue and groove, the front edge sweeped		
elliptic, the top side of ditto veneered, extra	1	25
Sweeping the ends of plinth elliptic	0	41
For scroll feet, veneering ditto, &c. see horizontal		
case.		
For consoles, or trusses, brackets, and veneering		
ditto, see table, No. 16.		
When bottom of case is to be made of hard wood,		
to be extra another and the second events are second events and the second events are second events	0	20
OF BACK OF CASE.		
Each rail eight inches wide or under, across the		
back of case as a stay, ditto glued or nailed -	0	<b>3</b> 0

A framed back with four panels, extra from start - \$1 50 Each extra panel of pine, or white wood in back, -0 20 When a back for case is made with four fast muntings across the case, and three loose pieces, or panels, rabbeted in between ditto, extra from 0 50 start -• ` -Each frame in the back, half lapped, made of pine, for gauze, extra from panels - -0 13 When ditto panels, or loose pieces, are let in with a double rabbet, to be extra each panel 0 10

# OF BRACES.

thick or under 0 60 Each half inch more in thickness than the start of each brace 0 4 Ditto, when of hard wood 0 6 Braces made of hard wood (other than pine or white wood,) to be extra each 0 21 When brace is thickened up with hard wood, see table, No. 3. When thickened up in two thicknesses of pine, see table, No. 3. When the braces are lapped on the blocks, two inches long or under, each end 0 5 Each inch more in length of lapping - 0 0½ When the braces are three inches thick and over, the lapping to be extra one quarter. When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4 When the end of braces is not notched in blocks, deduct each notch 0 3 Pinning braces to the blocks, each pin - 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 4	Each extra long or short brace in case, two inches		
<ul> <li>Each half inch more in thickness than the start of each brace 0 4</li> <li>Ditto, when of hard wood 0 6</li> <li>Braces made of hard wood (other than pine or white wood,) to be extra each 0 21</li> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 0½</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 5</li> </ul>	thick or under	0	60
<ul> <li>each brace 0 4</li> <li>Ditto, when of hard wood 0 6</li> <li>Braces made of hard wood (other than pine or white wood,) to be extra each 0 21</li> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 0½</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 4</li> </ul>	Each half inch more in thickness than the start of		
<ul> <li>Ditto, when of hard wood 0 6</li> <li>Braces made of hard wood (other than pine or white wood,) to be extra each 0 21</li> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping 0 01/2</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin 0 3</li> <li>Ditto, when screwed, each screw 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted acainst the blocks 0 5</li> </ul>	each brace	0	4
<ul> <li>Braces made of hard wood (other than pine or white wood,) to be extra each 0 21</li> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 01</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	Ditto, when of hard wood	0	6
<ul> <li>white wood,) to be extra each 0 21</li> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 01/2</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	Braces made of hard wood (other than pine or		
<ul> <li>When brace is thickened up with hard wood, see table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 01</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	white wood,) to be extra each	0	21
<ul> <li>table, No. 3.</li> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 0½</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	When brace is thickened up with hard wood, see	•	
<ul> <li>When thickened up in two thicknesses of pine, see table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 01/2</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	table, No. 3.		•.
<ul> <li>table, No. 3.</li> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 0<sup>1</sup>/<sub>2</sub></li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	When thickened up in two thicknesses of pine, see		
<ul> <li>When the braces are lapped on the blocks, two inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 01</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	table, No. 3.		
<ul> <li>inches long or under, each end 0 5</li> <li>Each inch more in length of lapping - 0 0½</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 4</li> <li>Each wedge in brace - 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	When the braces are lapped on the blocks, two		
<ul> <li>Each inch more in length of lapping - 0 01</li> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 4</li> <li>Each wedge in brace - 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	inches long or under, each end -	0	5
<ul> <li>When the braces are three inches thick and over, the lapping to be extra one quarter.</li> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 4</li> <li>Each wedge in brace 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	Each inch more in length of lapping -	0	$0\frac{1}{2}$
the lapping to be extra one quarter. When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4 When the end of braces is not notched in blocks, deduct each notch 0 4 Each wedge in brace - 0 3 Pinning braces to the blocks, each pin - 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3	When the braces are three inches thick and over,		-
<ul> <li>When the lapping of brace is sunk, or let into the blocks half inch or less, each end extra - 0 4</li> <li>When the end of braces is not notched in blocks, deduct each notch 0 4</li> <li>Each wedge in brace 0 3</li> <li>Pinning braces to the blocks, each pin - 0 3</li> <li>Ditto, when screwed, each screw - 0 3</li> <li>Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3</li> </ul>	the lapping to be extra one quarter.		
blocks half inch or less, each end extra - 0 4 When the end of braces is not notched in blocks, deduct each notch 0 4 Each wedge in brace 0 3 Pinning braces to the blocks, each pin 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3	When the lapping of brace is sunk, or let into the		
When the end of braces is not notched in blocks, deduct each notch 0 4 Each wedge in brace 0 3 Pinning braces to the blocks, each pin 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3	blocks half inch or less, each end extra -	0	4
deduct each notch 0 4 Each wedge in brace 0 3 Pinning braces to the blocks, each pin 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3	When the end of braces is not notched in blocks,		
Each wedge in brace 0 3 Pinning braces to the blocks, each pin 0 3 Ditto, when screwed, each screw - 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks - 0 3	deduct each notch	0	4
Pinning braces to the blocks, each pin 0 3 Ditto, when screwed, each screw 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks 0 3	Each wedge in brace	0	3
Ditto, when screwed, each screw 0 3 Each cheek piece fitted and glued on the ends of brace, and butted against the blocks 0 3	Pinning braces to the blocks, each pin -	0	3
Each cheek piece fitted and glued on the ends of brace, and butted against the blocks 0 3	Ditto, when screwed, each screw	Ō	3
brace, and butted against the blocks 0 S	Each cheek piece fitted and glued on the ends of	•	-
	brace, and butted against the blocks	0	<b>S</b>
Scalloping ditto, each 0 2	Scalloping ditto, each	0	2

<ul> <li>When a pine block a foot long, or under, is glued up in two thicknesses; fitted and glued between the braces, at either end, each -</li> <li>Ditto, a two-inch piece of pine fitted in the centre of braces, six inches long or under, and glued to the braces, each</li> <li>Letting in a stay, or cross brace, two inches wide, inch thick, into the braces and linings, for the top end of sounding-board</li> </ul>	\$0 13 0 7 0 38
OF REST-PIN AND HITCH-PIN BLOC	K.
When restpin-block is made without a rabbet, de- duct Dovetailing restpin-block with one dovetail into the	0 10
case ends Ditto, if more than one dovetail in the case end, extra	0 37 <del>1</del> 0 25
Crossing restpin-block with hard wood, one inch thick or under, with five joints in ditto, extra from start	0 39
For extra joints in crossing, see table, No. 2. Each inch more than three and a half in thickness of restpin-block, or half inch above nine in width of	
ditto Making an extra straight angle hitchpin-block, four feet six inches long, three inches thick or under,	07
five inches wide of pine, faced with hard wood long way	1 25
Each extra half inch in width, or thickness of angle- block	06
For veneering block, see table, No. 4. Sweeping front edge of block	0 12
Working a sweep rabbet in ditto Banding a sweep hitchpin-block, after the block is	0 20
Ditto, a straight hitchpin-block, after the block is glued in the case	0 75

Letting block into the bottom and end of case 34- \$0 25 Putting block in with a double tenon - addred the at 0.50 When the ends of blocks are fixed with dowels, or whether steady-pins, extra, each pin Preparing a separate piece of hard wood, three inches wide, three quarters thick or under, for hitch-pins, glued on the front of block - 62 For dowels or steady-pins in ditto, see braces, &c. Making a bass hitchpin-block in the bottom of case, three feet seven inches long, four inches wide, three inches thick, with one joint, ditto let into the Making a bass hitchpin-block, two inches thick, one foot nine inches long, four inches wide or under, the edge rabbeted, and ditto glued on the bottom of 4- 17 B- 2 JA- 19 (- JDS)- disercing - Carris - 0 25 case Cross-banding edge of ditto 0 : 6Slipping edge of cabinet ends, &c. with stuff thicker than a veneer, see table of joints, No. 2. Mortice lock in square, or sweeped key-bottom, see table, No. 1. Derrechand to be he we track the defense When the ends of cabinet, &c. are veneered after the case is put together, to be extra from table of veneering, double. Crotch to be three times. For leg-blocks refer to table of ditto blocks, No. 14. When the case is made without the angle hitchpinblock in the start, the bass hitchpin-block continued the length of case, and ditto let into the ends square, to be the same as the start, the extra length of braces included. When the bass hitchpin-block in the start is continued the length of case, and ditto let into the end, extra OF FRAMING, MUNTINGS, RAILS, &c. Making a frame for silk, with one munting in ditto 0.50Each extra munting, half lapped - 0 14 - 0 8 Ditto, if morticed and tenoned, extra

When silk frame is morticed and tenoned, to be extra
from half lapping = 100 = 100 = 200 = 200 = 50 13
For working ogee, or other moulding on the front of
frames, and veneering ditto, see tables, No. 9 or
No. 10. and Bager stadt to adding statements
Preparing, fitting, and glueing a piece on the back
edge of the top frame, to close the opening in top
of case left for tuning-nammer = 11-7-12-12 = 0.19
tables. As a defining the edge of front frames, see that the tables
When the upper frame in the start is made without
a rabbet. deduct 0 12
When the upper frame is made to form a double weight
rabbet, by letting in a veneer endway into a groove
in edge of frame, to be extra from start, per foot $> 0.3\frac{1}{2}$
Solid grounds, or hanging stiles, glued on the edge
of case ends, for upper or lower part, four inches
wide or under, each stile i what Bould in opposite 21.
When ditto are made the whole height of case, each and
stile and and the long-own so purchase - Apol-30 32
Veneering the front, or edge of hanging stiles, see older
tables, No. 4 or No. 6. 10 1926 devides herebas of met if
Each half inch more in width of hanging stiles $0 = 1$
For pilasters, caps, and bases, or columns, and ve-
neering ditto, see tables, Nos. 19, 20, 11 or 12.
raming a munting in the centre of lower frame, two most is
and a nall incres wide or under, all plate of the study 38
Dividing the laws from into two losses deaters 0. 55
Each half inch shows two and a half in midth of
door stilog or rollg over ooch stilo or roll and a fait
Introducing a munting (or stile) to soparate the
doors framed at the lower end
Astragal or fillet up the centre of door 0 10
A rail three quarters of an inch thick under the
edge of upper frame, forming a square fillet over
the fall, ditto steadied with three nins the case in 0 20
Veneering the sides, or edge of ditto, see table. No.
4 or No. 6.

When the above rail, forming a fillet, is broke		
around the ends of case, extra a manufactor and and	\$0	<b>I</b> 4
Rounding the edge of ditto, see table, No. 10.		
Each break in the above rail	0	ି 4
A rail over the top edge of the lower frame, fitted		
and glued on the under side of key-bottom, one		
inch wide or under	0	9
Each half inch more in depth of rail	0	1
Morticing and tenoning the rail into stiles or pilas-		
ters, extra	<b>O</b>	12
When panels in lower frame are rabbeted in from		
the back, extra each the second se	0	12
For mouldings in front of panels, see tables, No. 9		•
or No. 10.		
Champhering to form a raised panel, see tables,		
No. 10, No. 4, or No. 6.		•
Wood turn buttons for lower frame, each button, -	0	4
	-	
OF NAME-BOARDS.		
Making name-board oree in the depth veneering		
ditto, and banding the lower edge	1	50

- Scalloping top edge of name-board, and banding ditto \_\_\_\_\_\_ 0 1 A plain sweep, or faint elliptic name-board, or tablet hole for name-block in ditto, see horizontal case.
- Preparing and glueing a piece of mahogany four inches wide, half inch thick or less on the back of name-board, and bevelling top edge of ditto, for a book-rest
  A pair of quarter circle candle-boards, sunk flush
- with the top edge of name-board; ditto to turn on a centre screw - - - - 1 00

# OF OGEE FALLS, &c.

# Ogee Fall, No. 1.

Ogee fall three feet seven inches long, one foot six

inches wide, staved up, and veneered on both		
sides with shaded mahogany long way, the front		
and ends of fall slipped, and fitted between the		
cheeks; the cheeks solid and shaped to the fall		
and edge banded; a quarter-piece shaped and		
glued on the inside of cheeks, to form rabbet for		
over the front edge of her betters the front edge		
of key bettern freed with mehoreny	10	50
When the front odge of key better is rounded the	12	00
veneering of ditto to be double from the table of		
veneering of ditto to be double from the table of		
For hutt, or side joints in veneer on fall, see table		
No. 4.		
Each extra inch in width of fall, ditto to be mea-		
sured from the outside following the sweep -	0	50
Ditto in length	0	12
For cross, or long-banding the fall, see table, No. 6.		
Faint-rounding edge of fall, see table, No. 10.		
For letting in wood or brass lines, see table, No. 8.		
When the ogee stops at the upper-side of key-bot-	_11.	
tom, the front edge of ditto square, faced with		1
mahogany, deduct	0	50
Dutch-clamping the fall, to be extra from slipping -	0,	25
when the fall is made without the slip in start,		
A loose how bottom with a tenand device it of the second	U	16
in checks, the front of key bottom to project ever	•	R L
the checks, over	·	00
When oree fall is made to lan or project over the	<b></b> 	vu
edge of cheeks, deduct	1	0
	2 <b>- 1</b> .	
an to be the second second and the second	1 14	1. 22 
OF KEY-BOT TOM.		191
A THE THINK TO A		

5. S.Y.

Making an extra key-bottom of pine, morticed and tenoned, three feet seven inches long, one foot six inches wide, two inches thick or under, with two panels

#### Ogee Fall, No. 2.

Ogee fall with a flat top at back edge of ditto, eight inches wide, glued up solid with two joints, the underside of fall to form name-board when open; the fall dutch-clamped and veneered on both sides; the front, or lock-board, to rest on keyslip, or key-bottom, ditto veneered, centre plates let in for the fall to swivel on, edge of cheeks shaped to the fall, and banded - - - 578

# A CYLINDER FALL.

Cylinder fall, three feet seven inches long; nine" and a half inches wide, or under, staved up, with a flat top, seven inches wide at the back edge of fall, and flush with the cheeks, an upper top flush with front of ditto, and to lap over the cheeks, a piece fixed to the front edge of fall and part of the front (or lock-board) glued to the un-derside of ditto, the lower part fixed with three dovetails to the front of key-bottom, three pieces of a quarter circle under the fall in the middle, and two of ditto at the ends, with plates fixed for fall to thrn in, a plain veneered nameboard fixed on the quarter circle pieces to lift with the fall; the fall veneered on the outside with shaded mahogany, long way 7 00 When made without an upper top, deduct 25 Making a serpentine lock-board in depth, and veneered on one side with shaded mahogany 2 2 00 Each extra inch in width of cylinder, over nine and a half inches, to be measured on the top side of fall, and following the sweep and other that and bill Ditto in length of fall - and - where off in book bill Rabbeting the front of cheeks, half inch or under, 0 14 0 12

- \$1

8

the thickness of the fall; the back ends of cheeks grooved for fall to turn in, extra

Banding the sides of the rabbet on front of cheeks -0 18 When a solid piece of rose or other wood, and extra rabbeting for ditto are glued in the rabbet, the edge of ditto shaped to the fall -0 24 -The extra time over one half hour in making a mould, or in making or mending a straight or sweep caul, (including clamps or other fixtures,) to be paid for according to time. OF CORNICE, &c. When the case is made without the top-fall in start, 0 38 deduct -A loose cornice frame, four inches deep or under, three feet seven inches long, ten inches wide from back to front a strategie to the state of 0.50 Each extra inch in depth of ditto as a star-**0** 40 Ditto in length, every inch longer or wider from 2 back to front -When cornice frame is made of hard wood, to be - 0 25 extra Each brace, or cross piece, in ditto of pine - 0 9 Ditto, if hard wood - - 0 13 Rabbeting away the case ends, for cornice box to slide down, two inches deep or under Each extra inch in depth of ditto rabbet - 0 0 50 6 Preparing and glueing on the underside of cornice frame a piece of pine six inches wide or under, the length of cornice frame, to receive columns, &c. and the state of the - 020 For veneering panelling, or moulding the above, see tables. Making a plain sweep arch, or front of cornice frame, veneered on the front, the piece to be one inch and a quarter thick or under, to receive pilasters, &c. 0 55 Making an elliptic, extra 0 12 A solid block at the ends of arch, two inches thick . . ; or under, veneered in front, to receive columns 0 25 Each extra half inch in thickness of blocks - 80 2 Each extra half inch in thickness of arch - 0 12 Lap-dovetailing cornice frame, to be extra every four

inches in depth of ditto on each corner - - 0 3 For mitre dovetailing, see horizontal case.

For plinth glued on, or capping, or mouldings, fiilets, &c. or pitching of cap, or mitres in ditto, or cornice, see tables.

Veneering cap, or banding the edge, or rounding the edge of ditto, see tables,

For hinging cornice, or other hinges, see table, No.1.

# OF PEDIMENT, &c.

A plain pitch pediment-board for cabinet, &c. three feet six inches long, six inches deep in the centre, vencored on the front with sheled mehocener.

veneered on the front with shaded mahogany	U	50
Each inch less in length, deduct	0	11
Each inch more in length or width	0	รี
Re-turning pediment on the ends straight	0	16
Making ditto to correspond with the front, in the		
start, extra de de de a constante	0	12
A plain veneered tablet on front of pediment - Wilson	:0	<b>18</b>
Each plain pedestal on the front and end corners -	0	10
Each cap with square edge on top of tablet, or		
pedestals	0	4
For moulding ditto cap, see table, No. 10.		
Scalloping the top edge of pediment-board plain or		
elliptic sweep, extra and entre of a state a lot of the	° 0	18
Ditto the ends ditto	0	14
Forming a half circle on the top (in the centre) of		
start pediment	0	.12
Ditto each a quarter circle on the top of front cor-		0
ners and end corners	Ø	6
Cutting out the centre of pediment board, with two		10
hollows, extra	. 0	19
Shaping the edge of pediment, and forming scrolls	^	
at the centre, extra from start	0	41
Ditto to form scrolls at the front corners	U	<b>Z</b> Ə

Preparing and glueing on a pair of sweep fillets, and

ditto to form scrolls at the centre - · · · -- \$0 40 When fillets form scrolls on front corners, extra - 0 20 Working a hollow moulding on sweep fillets, extra 0 35 Ditto, an ogee moulding on ditto without a square -0 60 Ditto ditto, with a square, extra -0 28 Each rosette glued on scrolls 0 2For moulding on circles, &c. see tables, No. 9 or 10. For making a harmonic, or other size of a case, the price of ditto to be taken from the cabinet, de-

ducting for the size by the price in ditto.

# OF PLINTH.

A loose plinth, three feet seven inches long, two	:	
feet three inches wide, two and a half inches		
thick or under, thickened up in two pieces of pine,		•
the front sweeped elliptic, the top side veneered,	(A)	•
edge of ditto banded with shaded mahogany	2	75
Each inch more in length, or width, or half inch in		
thickness and	0	3
Sweeping the ends of plinth elliptic	0	41
For moulding fillets, &c. see tables.		

## OF FLY FINISHING.

Jointing and hinging a flat fall with three hinges - 0 40 For extra hinges, see table of brass work. Jointing and hinging an ogee fall with three hinges -0.80Each extra hinge on ogee fall - - $-0.12\frac{1}{2}$ Hinging ogee fall when varnished, extra - 0 20 When fall is unhinged for to be varnished •••• 0 6 Fitting and hanging lock-board with three hinges -0 28 For flush bolt, see table, No. 1.

# OF WORK RECEIVED BY THE CASE-MAKER, TO BE DEDUCTED.

nia di Paris.

When the stuff for the ends, rest-pin and hitch-pin

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## A PLAIN SQUARE PICCOLO, OR COTAGE CABINET PIANO-FORTE CASE OF MAHO-GANY, ALL SOLID.

Three feet six inches long, three feet three inches high; the ends nine inches wide; the cheeks square; one foot one inch long, seven inches wide, tenoned into the ends of case. A straight nameboard three inches wide or under, veneered with shaded mahogany. A flat fall and lock-board, with square\_edge to project over the edge of cheeks. A fast key-bottom of pine, two inches thick or under, framed and panelled, the front edge slipped with mahogany. The cheeks squaregrooved for key-bottom. Restpin-block five and. a half inches wide, three and a half inches thick, thickened up with hard wood lengthway, one veneer on ditto crossway, the block let into the endssquare, the lower edge of ditto rabbetted for sounding-board, linings on the inside of ends for ditto board. A straight hitchpin-block at the bottom of case, three and a half inches wide, two and a half inches thick, the ends of block let into the ends of case square. Five braces of pine, two inches thick or under, notched a quarter of an inch deep in the edge of blocks, a half inch pine, or whitewood-back nailed or glued on. The stiles and rails of the upper front frame, inch a half wide or under, with two panels ploughed in ditto, the frame steadied with three pins. The lower front framing two inches wide or nnder, with one panel ploughed in, ditto the frame steadied with two pins. A pine bottom in the case, one inch thick, the edge slipped with mahogany. A solid top fall,

square edge to ditto, half inch thick, forming a		
fillet on top of case	16	87
Each inch more in height, to three feet six inches -	0	12
Each mch more in length, or height, or width of ends,		
to three feet nine long, and three feet six inches		
high, to ten inches in width of ends, extra -	Ð	15
Each inch above three feet six inches in height -	0	19
Ditto, above three feet nine inches long, and one		
inch above ten in width of ends	0	20
Each inch more than seven in width of cheeks	0	4
Each extra half inch in thickness of cheeks, over		
seven-eighths thick	- (	) 6
Preparing a piece of pine, two inches wide, inch		
thick, the edge slipped with mahogany, ditto piece		
glued on the front of case bottom and on the ends		
to form a ground work for a band or plinth -	0	19
For planting on a plinth, or moulding, or fillets, or		
banding, see table, No. 9 or 10, and reference to	1	
ditto, No. 6 or 7.		· · ·
Preparing two pieces of pine to project in front, one		•
foot three inches long, four inches wide, two and a		
half inches thick or under, tenoning or half lapping		<u>,</u>
the same into the front edge of case bottom, top		
side veneered to form a continuation of ground-		-
work for a plinth	<b>\$</b> 0	75
When a centre-piece is fitted between the above,		
with a tongue and groove, the front edge sweeped		
elliptic, top side veneered, extra	1	25
Sweeping the ends of plinth elliptic	0	41
When bottom of case is made of hard wood, to be	- A.	
extra - the state of the state	0	20
For consoles or trusses, and brackets, and veneer-		
ing ditto, see table, No. 16. For the crotch price		
of veneering trusses, see table, No. 4.		
For scroll feet, see horizontal case. For other extras,		
see cabinet, &c. or for other extras, see other		
tables.		
When the ends of case are veneered after the case is		
put together, to be extra from table of veneering,		
double. Ditto, when with crotch, three times.		
Slipping the edge of case ends, see table of joints. For leg-blocks refer to the table of blocks.	2 4 2 4 - 14 	
--	------------------	-----------------
Mortice lock in square, or sweeped key-bottom, see		•••
table, No. 1. Martin and the half of the second state of the secon		•
inches long, three inches thick or under five inches		
wide of nine, faced with hard wood lengthway	\$0	87
For extra joints in thickening up ditto, see table.	φv	07
No. 3. State in the new set of the set of th		
Each extra haf inch in width, or the thickness of		
angle block	0	4
Working a straight rabbet in ditto	0	9
Sweeping front of block, see table, No. 4.		01
Working a sweep rabbet in ditto	0	$\frac{21}{15}$
Letting block into the bottom and end of case -	ŏ	25
Putting block in with a double tenon	0	50
When the ends of blocks are fixed with dowels or	j	
steady pins, each	0	3
Banding a straight, or sweep hitchpin-block, after the block is glued in the agen refer to achieve		
case deducting for size	, . 	
OF FRAMING MUNTINGS, RAILS, &	C.	
(a) A start for a start of the start of t		
When panel in lower frame is rabbeted in from the		10
Dack, extra each	0	12
each panel	0	10
For working moulding on edge of frames, or in front	v	10
of panels, or fillets, or beads, see tables.		
When upper frame is made without panels, deduct		
for each panel	0	20
Veneering panels, see table, No. 4.	•••	:
of handing		
Making a frame for silk, five inches wide, one foot		
six inches long, of pine or white wood, half lapped.		- - 1 - 4
extra from panels	0	12
6		

Dividing the lower frame into two loose doors - \$	0	75
Introducing a munting or stile to separate the doors, framed at the lower end	0	25
Tenoning the upper end of ditto into key-bottom, or	~	10
a rail, extra '	U	13
Each han inch above two and a han in which of each	0	3
Framing in a munting in the centre of lower frame.	U	U
two and a half inches wide, or under,	0	38
Astragal or fillet up the centre of door -	0	10
A rail over the top edge of the lower frame, fitted		
and glued on the underside of key-bottom, one	~	~
inch wide or less	0	9
Morticing and tenoning the above rail into stiles or	U	1
pilasters, extra 10 - 0 10 - 0 10 - 0 10 - 0 10 - 0 - 0	0	12
Solid grounds, or hanging stiles, fitted and glued on		
the edge of case ends of the state and a state of the sta	0	21
Each half inch more in width of hanging stiles	0	1
Veneering the front or edge of hanging stiles -	0	Ĩ
Veneering the front, or edge of hanging stiles, see		
For pilesters caps and bases or columns and ve-		
neering ditto, see tables		
Champhering to form a raised panel, see table No.10.		
Banding the champher, see ditto table.		
Making wood turn buttons for frames, each button	0	4
· 1.111、11、11月4月11、11、11、11日4月14日4月14日日本11、11日11		• • •
- OF NAME-BOARDS, &c.	•	·.
Making name beard area in death immediation ditte		•
and handing the square at the lower edge		50
Sweep or elliptic name-board or tablet hole in ditto	1	90.
see horizontal case.		
Making two square candle-boards, four inches wide.	•	
of mahogany, slipped in front to match name-		•
board, ditto sunk in the top edge of name-board -	0	63
Scalloping top edge of name-board, and banding		
ditto	0	12

# ound out , OF OGEE FALL, MED , and M

Ogee fall three feet seven inches long, one foot three inches wide, staved up, of a faint sweep, and veneered on both sides with shaded mahogany lengthway; the front and ends slipped, the cheeks solid and shaped to the fall, edge banded, the sweep of cheeks to stop four inches above the key-bottom, the fall to project over the front and ends -- \$9 50 Each extra inch in width of fall, ditto to be measured from the outside following the sweep - - 0 40 Ditto in length, - bitz - than-ales than dependent has - a 0 10 For butt, or side joints in veneer on fall, see table, which  $\mathbf{No.}$  5. - the standard matrix of  $\mathbf{b}$  and  $\mathbf{b}$  and  $\mathbf{b}$  and  $\mathbf{b}$  and  $\mathbf{b}$ For thick cross, or long banding edge of fall, or the set rounding ditto, see tables. Hauf and an enclar pairing in Cross or long banding the topside of fall, see table, No. 6. Attend hubbled as one with a back of the Letting in wood or brass lines in ditto, see table of straning. seditor con lottle in endition to acquire -Making the lock-board or front in two separate parts or pieces, the lower part fitted and glued on edge of key-bottom, the upper part prepared for fly Glueing a bar on the under side of fall, at the back discout Planting on a fillet, or bead, at the back part of fall, added to break the joint in front of top frame bab-bob d- q0 15 A cove-fall with a flat top at the back edge of ditto, veneered on both sides with shaded mahogany lengthway, the front and ends slipped, the cheeks shaped to the fall, and the edge banded, the fall to shaped project over the front and cheeks above and a different 5 00 OF WORK RECEIVED BY THE CASE-MAKER, enders an TO BE DEDUCTED. The Last manual (1985) 1.375 J. 1997/ -When the stuff for the ends, rest-pin and hitch-pin until blocks, the bottom and all the braces, linings, and one

44
<ul> <li>blockings, falls, checks, front framing, the back, &amp;c. is cut out to near the size, and jacked or roughed over \$1 50</li> <li>The extra time over one half hour in making a mould, in making or mending a straight, or sweep caul, (including clamps or other fixtures,) to be paid for according to time.</li> <li>BACK OF CASE.</li> </ul>
A framed back with two panels, extra from start - 1 0 Fitting and glueing a rail two inches wide or under, at the back of case, against the braces and linings, flush with the top edge of rest-pin block - 0 20 Veneering ditto, see table, No. 4 Making a frame for the back of case, the stiles and rails three inches wide or under, half inch thick, half lapped, to be the same as the start back. Veneering the frame, see table, No. 4 or 6. For mitres or mouldings in ditto, see tables. When the frame is morticed, to be extra from half lapping - 0 13 Each munting in frame, half lapped - 0 14 Ditto, if morticed, extra - 0 8 Working a rabbet on the inner edge of frame, to receive a frame - 0 18 Making a frame for silk, &c. with one munting, half lapped, for the back of case - 0 50
OF BRACES
Each extra brace, two inches thick or under - 0 40 Each half inch more in thickness of brace than the
start $0 \frac{1}{2}$ Ditto when of hard wood $0 \frac{1}{3}$ Braces made of hardwood, other than pine or white
wood, extra each 0 13 When brace is thickened up with pine or hard wood, see table, No. 3.

Ditto thickened up, &c. in two thicknesses of pine, see table, No. 3.
Lapping the braces on the back of restpin-block,
bottom, or bass block, two inches long or under,
Each inch more in length of lapping $ 0 0\frac{1}{2}$
When the braces lap straight, or sweep hitch-pin
block, to be extra, each lap 0 3
blocks, half inch or less, each end extra - 0 4
When the end of braces is not notched in blocks,
deduct each notch $-1$ and $-1$ and $-1$ and $-1$ and $-1$ and $-1$
For pinning, screwing, or wedging braces to the blocks, see cabinet.
For glueing cheek pieces on the ends of braces
against the blocks, and scalloping ditto, see
Letting in a stay, or cross-brace, two inches wide,
inch thick, into the braces and linings, for the top
of sounding-board - use - deserved - the state of 38
OF REST AND HITCH-PIN BLOCK.
When rest-pin block is made without a rabbet,
deduct 0 10
Each inch more than three and a half in thickness of
rest-pin block, and half inch above five and a fait
Dovetailing rest-pin block with one dovetail into the
case ends
Ditto, if more than one dovetail in case ends, extra 0 20
Crossing rest-pin block with hard wood, one inch
start 0 27
For extra joints in crossing, see table, No. 2.
Veneering the top edge of rest-pin block - 0 37
Notching, or cutting out the veneer round the top
ends of braces, and ming up ditto at the top of
rest-phi block, each hoton

# OF SOUNDING BOARDS.

For putting in a long sounding-board in a twostringed, six octave horizontal Piano-forte Case, the board to be four feet ten inches long, by two feet wide or under, with six straight bars on the under side, the bridge on ditto to be straight at bass and treble, with one sweep at the neck, a single row of pins on ditto, and ditto to be bevelled from the pins to the edge, and to be screwed and buttoned with ten screws; a single row of pins on long bridge, and ditto to be bevelled from the pins to the front edge of block; the front edge of long block to be hollowed out to make room for hammers, and to be bored for rest-pins; a metallic plate, to be pinned with one pin to a note, and screwed down with six screws, five inches long or under; a straight and a bead or champhered moulding around right-hand should edge of board; the board furnished planed near to a thickness and jointed, and all bridges and bars sawed to pattern. OTHE CHARTENEED MO Start - \$4 50 , radius re ducid EXTRAS. Shuddh nig-serie 10. Fitting and glueing in long block and a star hour tist 0 62 Glueing bridge on ditto Rabbetting long block to receive bridge on the offer 0 9 Making bridge on a sweep, each sweep 4Rabbetting top of bridge up to pins, to finish with a hollow or bevel - - - 0 18 Ditto the under side, to receive damper sockets - 0 6 A second row of pins on ditto - 016 A third row Putting a brass bridge on treble end of long block Putting screws on long bridge, one inch long or under for each screw -  $0.0\frac{1}{2}$ Cutting away front of long block for damper wires, each note and have a the second of the

Glueing piece on treble end of ditto, to form a ra	bbet	\$0	7
Shaping front of long block	-	0	15
A short bracket let into long block, for boar	d to		
rest on	· •	0	13
Each screw four inches long or under, put thr	ough		
back to secure ditto	-	0	3
Each pin put through ditto	-	0	4
Wedging ditto on the outside	-	0	$0\frac{1}{2}$
Putting an inch pin through the back, exter	nding		
down into the bottom, to keep the back	from	-	~ ~
springing out -		0	25
Each extra inch in length of board	1 <b>44</b>	0	6
Each half inch in width of ditto		:0	6
Rounding back edge of board	, -	0	6
Each extra straight bar on the under side of bo	ard -	0	6
When ditto is made on a sweep	1 0	0	2
Each extra screw and button on the under si	de of	0	
board	-	0	$1\frac{1}{2}$
Each extra sweep on belly bridge	-	, U	0
Cutting away and glueing a piece on at the ne	CK OI	•	0
	-		0
A second row of pins on ditto	•	0	13
A third row	haller	U	10
Working a hollow on the top of treble end of	belly	<u>م</u>	F
bridge, from the pins to the edge, each hold	·₩ -		0 10
A short belly bridge, one loot long of under -	-		10
Each extra inch in length of ultio -		U U	2
When ends of ditto are extended three or	more	;	
inches, scalloped, and infistied down to t	ioaru,		Q
extra for each end -	d	. 0	 Q
Waking the ends of belly bridge ogee, each en	u -	0	10
Working a hollow on the top of short bruge -		· 0	14
Levelling bottom of case	•	. 0	20 Q
Ditto for each extra half octave	ining	• •	J
Fitting to a neight, and glueing in a back i	ming	ໍ່ດ	8
when ditto is fitted by the case-maker	اممار		0
Fitting and glueing in a small piece on cross-	DIOCK	์ ก	٨
at the end of the above lining		0	<del>,</del>
Shaping braces, each brace	-	. 0	~

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Cutting away angle block to leave less surface for board to rest on	48		
board to rest on       \$0 12         When linings of case are of plain maple, extra for cleaning       0 12         When ditto is of crotch mahogany, bird's-eye, or curled maple       0 18         A cupboard top made of cherry or mahogany, to square-cornered case       0 20         Ditto to round-cornered case       0 25         Ditto to astragal front case       0 40         When ditto is of bird's-eye or curled maple, extra       0 6         Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop       0 16         Cutting a hole through cupboard top for harp or buff stop       0 10         Ditto, when made of bird's-eye, or curled maple       0 13         Varnishing board and inside of case       0 20         Lettering long-block, when written with a pen       0 6         When ditto is done with printer's ink and type       0 12         Ditto when printed with a pen       0 78         Each extra half octave, not including the extra size of board       0 20         A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany       0 37         When ditto is made of rose wood, bird's-eye, or curled maple, extra       0 10         Glueing a piece on board over linings, or blocks flush with long block for plate t	Cutting away angle block to leave less surface for		
When linings of case are of plain maple, extra for cleaning       0       12         When ditto is of crotch mahogany, bird's-eye, or curled maple       0       18         A cupboard top made of cherry or mahogany, to square-cornered case       0       20         Ditto to round-cornered case       0       20         Ditto to astragal front case       0       20         When ditto is of bird's-eye or curled maple, extra       0       6         Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop       0       16         Cutting a hole through cupboard top for harp or buff stop       0       16         Cutting a hole through cupboard top for harp or buff stop       0       10         Ditto, when made of bird's-eye, or curled maple       0       13         Varnishing board and inside of case       0       25         Lettering long-block, when written with a pen       0       6         When ditto is done with printer's ink and type       0       12         Ditto when printed with a pen       0       78         Each extra half octave, not including the extra size of board       0       20         A bar on top of board made on a sweep, three inches wide or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany       0	board to rest on	<b>\$</b> 0	12
cleaning012When ditto is of crotch mahogany, bird's-eye, or curled maple018A cupboard top made of cherry or mahogany, to square-cornered case020Ditto to round-cornered case025Ditto to astragal front case -040When ditto is of bird's-eye or curled maple, extra06Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop016Cutting a hole through cupboard top for harp or buff stop013When moulding, or fillet, around edge of board are made of plain maple, extra010Ditto, when made of bird's-eye, or curled maple013Varnishing board and inside of case025Lettering long-block, when written with a pen06When ditto is done with printer's ink and type012Ditto when printed with a pen078Each extra half octave, not including the extra size of board020A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany037When ditto is made of rose wood, bird's-eye, or curled maple, extra018Ditto of plain maple010Glueing a piece, or fillet, on board, in the rabbet, flush with loncks08A corner piece with a bead motflding, to break joints back of plate025	When linings of case are of plain maple, extra for		
<ul> <li>When ditto is of crotch mahogany, bird's-eye, or curled maple 0 18</li> <li>A cupboard top made of cherry or mahogany, to square-cornered case 0 20</li> <li>Ditto to round-cornered case 0 40</li> <li>When ditto is of bird's-eye or curled maple, extra 0 40</li> <li>When ditto is of bird's-eye or curled maple, extra 0 16</li> <li>Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop 0 16</li> <li>Cutting a hole through cupboard top for harp or buff stop</li></ul>	cleaning	0	12
curled maple018A cupboard top made of cherry or mahogany, to square-cornered case020Ditto to round cornered case025Ditto to astragal front case -040When ditto is of bird's-eye or curled maple, extra06Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop016Cutting a hole through cupboard top for harp or buff stop016Cutting a hole through cupboard top for harp or buff stop010Ditto, when made of bird's-eye, or curled maple013Varnishing board and inside of case025Lettering long-block, when written with a pen06When ditto is done with printer's ink and type012Ditto when printed with a pen078Each extra half octave, not including the extra size of board020A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany037When ditto is made of rose wood, bird's-eye, or curled maple, extra018Ditto of plain maple018Ditto of plain maple018Ditto of plain maple018Ditto is made of rose wood, bird's-eye, or curled maple, extra018Ditto is made of nobard over linings, or blocks08A corner piece with a bead motfiding, to break joints back of p	When ditto is of crotch mahogany, bird's-eye, or		
A cupboard top made of cherry or mahogany, to square-cornered case 025 Ditto to round-cornered case 040 When ditto is of bird's-eye or curled maple, extra 06 Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop 016 Cutting a hole through cupboard top for harp or buff stop 016 Cutting a hole through cupboard top for harp or buff stop 017 Ditto, when made of bird's-eye, or curled maple 013 Varnishing board and inside of case 025 Lettering long-block, when written with a pen 06 When ditto is done with printer's ink and type 012 Ditto when printed with a pen 07 Each extra half octave, not including the extra size of board 020 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 037 When ditto is made of rose wood, bird's-eye, or curled maple 010 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on 018 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks 08 A corner piece with a bead motilding, to break joints back of plate 025	curled maple	0	18
square-cornered case 0 20 Ditto to round-cornered case 0 25 Ditto to astragal front case 0 40 When ditto is of bird's-eye or curled maple, extra 0 6 Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop 0 1 6 Cutting a hole through cupboard top for harp or buff stop 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra 0 10 Ditto, when made of bird's-eye, or curled maple 0 13 Varnishing board and inside of case 0 25 Lettering long-block, when written with a pen 0 6 When ditto is done with printer's ink and type 0 12 Ditto when printed with a pen 0 78 Each extra half octave, not including the extra size of board - 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead motilding, to break joints back of plate - 0 25	A cupboard top made of cherry or mahogany, to		
Ditto to round-cornered case - 0 25 Ditto to astragal front case - 0 40 When ditto is of bird's-eye or curled maple, extra - 0 6 Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop - 0 16 Cutting a hole through cupboard top for harp or buff stop - 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra - 0 10 Ditto, when made of bird's-eye, or curled maple - 0 13 Varnishing board and inside of case - 0 25 Lettering long-block, when written with a pen - 0 6 When ditto is done with printer's ink and type - 0 12 Ditto when printed with a pen - 0 78 Each extra half octave, not including the extra size of board 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead moulding, to break joints back of plate - 0 25	square-cornered case	0	20
Ditto to astragal front case - 0 40 When ditto is of bird's-eye or curled maple, extra - 0 6 Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop - 0 16 Cutting a hole through cupboard top for harp or buff stop - 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra - 0 10 Ditto, when made of bird's-eye, or curled maple - 0 13 Varnishing board and inside of case - 0 25 Lettering long-block, when written with a pen - 0 6 When ditto is done with printer's ink and type - 0 12 Ditto when printed with a pen - 0 78 Each extra half octave, not including the extra size of board 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead moulding, to break joints back of plate - 0 25	Ditto to round-cornered case	0	25
<ul> <li>When ditto is of bird's-eye or curled maple, extra - 0</li> <li>Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop - 0</li> <li>Cutting a hole through cupboard top for harp or buff stop - 0</li> <li>When moulding, or fillet, around edge of board are made of plain maple, extra - 0</li> <li>Ditto, when made of bird's-eye, or curled maple - 0</li> <li>Varnishing board and inside of case - 0</li> <li>Uettering long-block, when written with a pen - 0</li> <li>When ditto is done with printer's ink and type - 0</li> <li>Ditto when printed with a pen - 0</li> <li>Tach extra half octave, not including the extra size of board - 0</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0</li> <li>Ditto of plain maple - 0</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0</li> <li>S A corner piece with a bead motilding, to break joints back of plate - 0</li> <li>25</li> </ul>	Ditto to astragal front case -	0	40
Cutting away left-hand block level with board, and fitting and glueing in a piece to ditto, for harp or buff stop 0 16 Cutting a hole through cupboard top for harp or buff stop 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra 0 10 Ditto, when made of bird's-eye, or curled maple 0 13 Varnishing board and inside of case 0 25 Lettering long-block, when written with a pen 0 6 When ditto is done with printer's ink and type 0 12 Ditto when printed with a pen 0 78 Each extra half octave, not including the extra size of board - 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 18 Ditto of plain maple 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks 0 8 A corner piece with a bead motilding, to break joints back of plate 0 25	When ditto is of bird's-eye or curled maple, extra -	0	6
fitting and glueing in a piece to ditto, for harp or buff stop 0 16 Cutting a hole through cupboard top for harp or buff stop 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra 0 10 Ditto, when made of bird's-eye, or curled maple 0 13 Varnishing board and inside of case 0 25 Lettering long-block, when written with a pen 0 6 When ditto is done with printer's ink and type 0 12 Ditto when printed with a pen 0 78 Each extra half octave, not including the extra size of board 0 0 10 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 18 Ditto of plain maple 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks 0 8 A corner piece with a bead moulding, to break joints back of plate 0 25	Cutting away left-hand block level with board, and		
buff stop016Cutting a hole through cupboard top for harp or buff stop03When moulding, or fillet, around edge of board are made of plain maple, extra010Ditto, when made of bird's-eye, or curled maple013Varnishing board and inside of case025Lettering long-block, when written with a pen06When ditto is done with printer's ink and type012Ditto when printed with a pen078Each extra half octave, not including the extra size of board020A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany037When ditto is made of rose wood, bird's-eye, or curled maple, extra018Ditto of plain maple010Glueing a piece on board over linings, or blocks flush with long block for plate to rest on018A corner piece with a bead motilding, to break joints back of plate025	fitting and glueing in a piece to ditto, for harp or		
Cutting a hole through cupboard top for harp or buff stop 0 3 When moulding, or fillet, around edge of board are made of plain maple, extra 0 10 Ditto, when made of bird's-eye, or curled maple 0 13 Varnishing board and inside of case 0 25 Lettering long-block, when written with a pen 0 6 When ditto is done with printer's ink and type 0 12 Ditto when printed with a pen 0 78 Each extra half octave, not including the extra size of board 0 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 18 Ditto of plain maple 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on 0 18 A corner piece with a bead motilding, to break joints back of plate 0 25	buff stop	0	16
buff stop 0 10 When moulding, or fillet, around edge of board are made of plain maple, extra 0 10 Ditto, when made of bird's-eye, or curled maple 0 13 Varnishing board and inside of case 0 25 Lettering long-block, when written with a pen 0 6 When ditto is done with printer's ink and type 0 12 Ditto when printed with a pen 0 78 Each extra half octave, not including the extra size of board 0 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 18 Ditto of plain maple 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on 0 18 A corner piece with a bead motilding, to break joints back of plate 0 25	Cutting a hole through cupboard top for harp or	_	
<ul> <li>When moulding, or fillet, around edge of board are made of plain maple, extra - 0 10</li> <li>Ditto, when made of bird's-eye, or curled maple - 0 13</li> <li>Varnishing board and inside of case - 0 25</li> <li>Lettering long-block, when written with a pen - 0 6</li> <li>When ditto is done with printer's ink and type - 0 12</li> <li>Ditto when printed with a pen - 0 78</li> <li>Each extra half octave, not including the extra size of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple - 0 10</li> <li>Glueing a piece on board over linings, or blocks fush with long block for plate to rest on - 0 18</li> <li>A corner piece with a bead motilding, to break joints back of plate - 0 25</li> </ul>	buff stop	0	3
made of plain maple, extra - 0 10 Ditto, when made of bird's-eye, or curled maple - 0 13 Varnishing board and inside of case - 0 25 Lettering long-block, when written with a pen - 0 6 When ditto is done with printer's ink and type - 0 12 Ditto when printed with a pen - 0 78 Each extra half octave, not including the extra size of board - 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18 Ditto of plain maple - 0 10 Glueing a piece on board over linings, or blocks fush with long block for plate to rest on - 0 18 A corner piece with a bead motilding, to break joints back of plate - 0 25	When moulding, or fillet, around edge of board are		
<ul> <li>Ditto, when made of bird's-eye, or curled maple - 0 13</li> <li>Varnishing board and inside of case - 0 25</li> <li>Lettering long-block, when written with a pen - 0 6</li> <li>When ditto is done with printer's ink and type - 0 12</li> <li>Ditto when printed with a pen - 0 78</li> <li>Each extra half octave, not including the extra size of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple - 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>A corner piece with a bead motilding, to break joints back of plate - 0 25</li> </ul>	made of plain maple, extra	0	10
Varnishing board and inside of case - 0 25 Lettering long-block, when written with a pen - 0 6 When ditto is done with printer's ink and type - 0 12 Ditto when printed with a pen - 0 78 Each extra half octave, not including the extra size of board - 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18 Ditto of plain maple - 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead mothding, to break joints back of plate - 0 25	Ditto, when made of bird's-eye, or curled maple -	0	13
Lettering long-block, when written with a pen - 0 6 When ditto is done with printer's ink and type - 0 12 Ditto when printed with a pen - 0 78 Each extra half octave, not including the extra size of board - 0 20 A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra 0 18 Ditto of plain maple - 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead mothding, to break joints back of plate - 0 25	Varnishing board and inside of case	0	25
<ul> <li>When ditto is done with printer's ink and type - 0 12</li> <li>Ditto when printed with a pen - 0 78</li> <li>Each extra half octave, not including the extra size of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple - 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>A corner piece with a bead mothlding, to break joints back of plate - 0 25</li> </ul>	Lettering long-block, when written with a pen -	0	6
<ul> <li>Ditto when printed with a pen - 0 78</li> <li>Each extra half octave, not including the extra size of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany - 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple - 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8</li> <li>A corner piece with a bead mothding, to break joints back of plate - 0 25</li> </ul>	When ditto is done with printer's ink and type -	0	12
<ul> <li>Each extra half octave, not including the extra size of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8</li> <li>A corner piece with a bead motilding, to break joints back of plate - 0 25</li> </ul>	Ditto when printed with a pen	0	78
<ul> <li>of board - 0 20</li> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8</li> <li>A corner piece with a bead motilding, to break joints back of plate - 0 25</li> </ul>	Each extra half octave, not including the extra size		
<ul> <li>A bar on top of board made on a sweep, three inches wide or under, and one inch thick or under, fitted to the cheeks, rabbeted to clear the strings, and shaped for desk, of cherry or mahogany 0 37</li> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18</li> <li>Ditto of plain maple 0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8</li> <li>A corner piece with a bead motilding, to break joints back of plate - 0 25</li> </ul>	of board	0	20
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and shaped for desk, of cherry or mahogany - 0 37 When ditto is made of rose wood, bird's-eye, or curled maple, extra - 0 18 Ditto of plain maple - 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead motilding, to break joints back of plate - 0 25	fitted to the cheeks, rabbeted to clear the strings,		
<ul> <li>When ditto is made of rose wood, bird's-eye, or curled maple, extra</li> <li>0 18</li> <li>Ditto of plain maple</li> <li>0 10</li> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on</li> <li>0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks</li> <li>0 8</li> <li>A corner piece with a bead motilding, to break joints back of plate</li> <li>0 25</li> </ul>	and shaped for desk, of cherry or mahogany	0	37
curled maple, extra Ditto of plain maple Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead mothding, to break joints back of plate - 0 25	When ditto is made of rose wood, bird's-eye, or		
Ditto of plain maple 0 10 Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks 0 8 A corner piece with a bead modlding, to break joints back of plate 0 25	curled maple, extra	0	18
<ul> <li>Glueing a piece on board over linings, or blocks flush with long block for plate to rest on - 0 18</li> <li>Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8</li> <li>A corner piece with a bead mothlding, to break joints back of plate - 0 25</li> </ul>	Ditto of plain maple	0	10
flush with long block for plate to rest on - 0 18 Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead motilding, to break joints back of plate - 0 25	Glueing a piece on board over linings, or blocks		
Glueing a piece, or fillet, on board, in the rabbet, flush with blocks - 0 8 A corner piece with a bead moddling, to break joints back of plate - 0 25	flush with long block for plate to rest on	0	18
flush with blocks - 0 8 A corner piece with a bead mothding, to break joints back of plate - 0 25	Glueing a piece, or fillet, on board, in the rabbet,		
A corner piece with a bead mothding, to break joints back of plate 0 25	flush with blocks	0	8
back of plate 0 25	A corner piece with a bead moulding, to break joints		
	back of plate	0	25

When moulding around ditto is made of plain maple,

Ditto of rose wood, bird's-eve, or curled maple - (	) 12
Each extra screw in plate	) 2
An iron brace from long block to plate, with a bolt	
through bottom	15
A mahogany capping over plate, without moulding	37
Working a bead on ditto	) 7
When capping is made of plain maple, extra -	) 10
Ditto of rose wood, bird's-eye, or curled maple - (	) 18
Letting the plate into the back and end (	18
Ditto into back only (	) 10
Cutting out right-hand cheek to receive board - 0	) 4

# A BRACE IN FRONT OF CASE.

Getting out a brace the length of the case, and in width to come to the front between the ends and the cheeks, and in a line with a straight nameboard, six inches wide or under at ditto, made of cherry or mahogany, one inch thick or under, veneered lengthway, and cleaned off -0 12 When veneered crossway, not including joints, extra 0 12 0 5 Each extra inch in width of brace Getting out an under thicknessof brace, in width as top bar, of cherry or mahogany, one inch thick 0.32or under, and planing ditto to a thickness -Each extra quarter of an inch in thickness of either 0 6 brace .... When the brace is made of maple or beach, to be 0 14extra for each thickness 0 6 Ditto when made of ash, extra When made of pine or other soft wood, for each thickness deduct 0 10 When ditto only comes in the rabbet of the left-hand 6 block or cheek, deduct 4 Ditto the under thickness Getting out a separate piece, or cupboard top, at

the left end of brace of cherry or mahogany, veneered and cleaned off • . • . • . • . \$0 12 Fitting the above brace to the front between the ends and the cheeks, for a straight name-board, with or without a separate piece at the left end of brace . Planing the brace to its proper thickness outs. Mar. 0 15 When a separate piece, or cupboard top, at the left end, is rabbetted in the brace, extra and is raight 0 12 Fitting the brace to a canted, hollow, or round-back cornered case For . West the strike pic of 0.013 Fitting ditto to the hollow, or other shapes of the rim, at the inside of the tablets manharman and the set 0 32 When the upper and under thickness is glued together before it is fitted, or of plank, to be extra for fitting 0 17 Scalloping back edge of brace at the right hand of の目れ ditto with a round, square and hollow and the 20 12 Ditto a plain ogee that how our yunverlage with 0 7 Rabbeting or rounding the under side at the back edge of brace to clear the strings the strings of 8 Reducing the right-hand end of ditto, to clear the board, to about three-quarters of an inch from the When ditto is cut through to the front with the fro Fitting the brace to the plate and knob, for each thickness. ····6 When ditto is varnished and polished, before it is fitted, to be extra for fitting and glueing done at 0 12 When the brace is made of maple or beach, to be extra for fitting Glueing in the brace Fitting and glueing a bead at the left end of brace, to extend around the front of rim, and side of cheek 0 12 61 (distant) (dis 20 0 18 Ditto on a round-cornered case

Fitting an under thickness of brace to the front.		
between the ends and cheek	<b>\$</b> 0	25
When a thin piece of pine or spruce, a quarter of an	<b>-</b>	
inch thick or less, is glued on the board between		
the cheeks, and carried around the right-hand		
cheek and front, for the brace to rest on .	0	<b>28</b>
When a thin fillet, one inch wide or under, of pine,		
fitted to the beveled ends of cheeks, glued on the		
front edge of sounding-board, and carried round		
the right-hand cheek and front, and a piece the		
same thickness on the left-hand block from the		
back edge of brace to the front, between the end		
and cheek, for sweep name-board	0	50
Glueing in the under thickness of brace	0	16
and the second	· , ·	
DEDUCTIONS.	•	
When the brace is made of nine or other soft wood	•	
for fitting deduct for each thickness	0	8
When ditto only comes to the rabbet of the left end	Ŭ	0
block or cheek deduct for fitting and glueing each	, <u> </u>	
thickness	່າດ	19
Dipping the plate and filing off ping	. U	90
Scrowing in ditto		20 00
	· U	<i>4</i> 0

# SHORT SOUNDING-BOARD.

- 015

- 0 4

0 18 0 15

For putting in a short sounding-board in a twostringed, six octave horizontal Piano-forte case, the board to be two feet four inches long, by two feet wide or under, with six straight bars on the under side, the bridge on ditto to be straight at treble and bass, with one sweep at the neck, a single row of pins on ditto, and ditto to be beveled from the pins to the edge, and to be screwed and buttoned with ten screws; a single row of

Moulding around right hand edge of board

Boring ditto

Pricking long block for boring holes for rest-pins

pins on long bridge, and ditto to be beveled from the pins to the front edge of block; the front of long block to be hollowed out to make room for hammers, and to be bored for rest-pins; a metallic plate to be pinned with one pin to a note, and screwed down with six screws five inches long or under; a straight bead or champhered moulding around edge of board; the boards furnished planed near to a thickness, and jointed, and all bridges and bars sawed to pattern.

# EXTRAS.

Each extra inch in length of board	0	3
Ditto in width,	0	9
Sweeping front edge of board	0	4
Making front moulding to finish with capping to plate	0	7
Glueing rosettes on capping to cover screws, each	0	$\frac{1}{2}$
A sweep moulding on front edge of board	0	13
Scratch beading, both edges of ditto	0	14
For other extras and deductions, see long sounding-		
board.		1 •
ADUTING OUT I ONG COUNDING DOAL		· .
GETTING OUT LONG SOUNDING-BOA	RI	).
Getting out and rough-jacking a long horizontal sounding-board, four feet ten inches long, by two		140 
feet wide or under, with four joints or less, length-		÷ .
way Frank Same Street To go To Los To set 7.	0	36
Planing board near to a thickness	0	14
Each extra inch in length or width	0	1
Each extra joint one foot long or over -	0	6
When the board is made cross or angleway with		Ŭ
five joints	0	10
Each extra joint in ditto		14
	U	4
GETTING OUT SHORT SOUNDING BOA	<b>P</b> T	h
OOL MIGHT SOUNDING-BOA	117	J ,
Getting out and rough-jacking a short horizontal	•••	

sounding-board, two feet six inches long, by two feet wide or under, with four joints or less - \$0 20 Planing board near to a thickness ···· 0 10 Each extra inch in length or width - - - 0 1 Each extra joint, one foot long or over -. - 0 4 When the board is made cross or angleway --6 JOINTING CABINET AND PICCOLO SOUND-ING BOARDS. al may all sould be a sum of a Jointing a Cabinet Sounding-Board. Getting out and rough-jacking a cabinet soundingboard with eight joints or less in ditto - - 0 40 Planing board near to thickness, four feet long, three - 0 27 Each extra inch in length, or width - 0 1 Each extra joint, one foot long or over - 0 8 When the board is made (cross) or angleway, extra 0 14 Jointing a Piccolo Sounding-Board. Getting out and rough-jacking a piccolo soundingboard, with eight joints or less in ditto - 0 30 Planing board near to thickness, two feet ten inches long, three feet six inches wide or under - 0 25 Each extra inch in length or width 0 1 Each extra joint, one foot long, or over - . . . . . 0 71 When the board is made (cross) or angleway, extra 0  $\bar{9}$ PRICE FOR PUTTING A SOUNDING-BOARD IN AN UPRIGHT SIX OCTAVE TWO-STRING-

The board to be four feet long, by three feet six inches wide, with seven straight bars on the underside; two bridges on ditto, the long bridge on a sweep, short ditto straight, with fifteen buttons and screws to secure ditto; sweep bridge on rest

ED PIANO-FORTE CASE.

block and straight at bass, a straight angle block to receive board ; a slip to break joints around edge of ditto; a double row of pins on belly-bridge, single row on restpin-block bridge - \$4 00 -Each inch more or less in length of board, add or deduct 0 4 0 20 Each extra half octave Notching (or cutting) out the bridge on board in 0 31 front of pins on one side When the above notching is sunk square about a  $0\ 50$ sixteenth of an inch Notching (or cutting) the restpin-bridge in front of  $0\ 25$ the pins -When made with three strings to a note 0 41 Getting out and planing sounding-board bridges 0 37 Lapping the bridge at bass -0 6 0 12 Making bass bridge on a sweep, extra -0 12 Working a hollow on top of ditto Getting out and planing restpin-block bridge -0 18 Cutting off the upper corner of board, making and fitting a bar under to support ditto -0 20 Making and fixing a bar across the bass end of  $0\ 20$ board **R**abbeting either of the above bars, each bar 0 6 Each extra bar one half inch thick, one inch wide or under 0 6 Each quarter of an inch more in thickness or width of bar, extra 1 0 Each intersection of a bar mitreing, or letting in ditto each end 2 0 Working a quirk bead on edge of sounding-board slip 0 6 When slips are made of maple or similar hardwood, extra 0 6 Each extra button and screw 0 11 Black-leading bridges 0 12 When an opening is left between the rest-block and sounding-board 0 12 Getting out and preparing a piece of hard wood, inch thick, sweeped on the back, a rabbet in front edge

of ditto, fitted and glued on the braces to receive		
a metallic plate	<b>\$</b> 0	<b>50</b> <sup>-</sup>
When the linings have to be raised a half inch or less	•	
for board	0	30
Working out a groove three-eighths deep in the bot-		
tom and end of case, and fitting board into ditto		
at the bass end	0	75
A metallic plate fitted and fixed with ten screws,		
the pinning to be furnished, filed off -	0	<b>3</b> 8
When the key-bottom is glued in before the board,		
extra	0	12
when the plate is let through the bottom, the lap or	~	4.0
Filling up ditte d la ith second	0	40
Fining up ultto hush with wood	0	12
Vormishing board and inside of case	0	- 9 20
Latting a brogg plate through the bettern fixed on	U	32
the base bitchpip block for base strings, with five		
acrews	0	18
Boring the plate each pote	0	10
Boring for screws each	0	2
Fitting sounding-hoard with slip to a sweeped hitch-	Ŭ	~
pin-block	0	38
Banding a sweeped hitchpin-block after the board is	•	
glued in	0	75
Banding a straight hitchpin-block after the board is		
glued in	0	50
Making and fitting two blocks on restpin-block for		
action to rest against	0	12
Ditto, ditto, two blocks to fix springs to confine		
action	0	19
When the key-bottom is glued in before the sound-		
ing-board, to be extra	0	38
Glueing in the key-bottom, or the cheeks with ditto	0	25
Cutting out the braces, to clear bars on the back of		
board, a quarter of an inch deep or under, each		
cut	0	2
The boards to be furnished jointed and planed to		
near the thickness.		

## MAKING ACTION.

The following prices are intended for six octave piano-forte action. When there are more or less than six octaves to the set, they are to be paid for in proportion. Dampers fifty-six to the set.

# ENGLISH ACTION.

· • · · · · •

# Upper Hammers, (No. 1.)

Made of thin mahogany, with leather or parchment hinge; grain off the heads parallel with the shanks. square on the top, and glued on previous to sawing the shanks apart; shanks tapered and planed straight, see plate 1, figure 1 and Tapering heads, each set 0 6 Rounding twenty-four shanks, making and boring See. heads for ditto, as in plate 1, figure 1 0 32 Rounding lower back corner of heads for back catch 0 21 Tenoning and glueing in twenty-four heads, as in plate 1, figure 4 -0 19 Leathering or black-leading underside of heel-piece 0 25 For extra shaped heads and back catches, see French action.

# Upper Hammers, (No. 2.)

Made of thin mahogany, with leather or parchment hinge; a quick hollow on each side of the shanks, about one inch from the hinge; shanks rounded three-fourths of their length; heads tapered in height from treble to bass, cut wider at the top than bottom, and bored in different positions to fit the strings, and lower back corner rounded for back catch

When ditto are made without leather or parchment hinge, thickened up and tenoned for hinge butts, and drilled for pins, see plate 1, figure 3, extra

Upper Hammers, (No. 9.)	•	د
Made of thin mahogany, with a hammer butt the		
same thickness, and about one inch in length; a		
parchment hinge grooved into each; front end	1	
tanered and planed straight and ord of dive		
rounded to receive head, see plate 1, figure 4	\$1	60
When made with a leather hinge, grooved in as	Ψ.1	00
above an an anti-but long the best the and	0	6
Boring a set of butts, one hole in each	0	7
Making a set of heads as in plate 1, figure 1, tapered		
width at top and bottom and all bored in the same		•••• -
position	0	88
When bored in different positions to fit the strings,	Lan	
extra	0.	6
Rounding lower back corner for back catch	0	21
When heads are made of manle holly or similar	U	<b>0</b> G
hard wood, to be 20 per cent extra. We down when		
r indeeing sepanter end di nacimer for s		. <b>t</b>
1 U Hammer Butts	<b>,</b> 0).	ib
Made with a rabbet on the under side, rounded on		
the ends, drilled for pin and bored for shank, and	2.0	
a flat piece glued in the rabbet, for the action of	- N	75
Leathering or black-leading underside	0	25
Hinge butts similar to horizontal damper butts,	it in	
except the rounding of the ends, see plate 1,	- Mita T	)
figure 6	0	75
For paper punchings, &c. see French action.	÷.,	•••
<b>Under Hammers</b>	•	
and the Mission and Company and the set of the set	÷.,	•
In the sheet, with straight ships grow across the	-n	88
Each extra strip as above	.: <b>0</b> .	8
When grain of the above strip is parallel with that		
of the hammers, extra	0	3
8		

58
Sawing hammers apart, and beveling heads, see plate 1, figure 5 and in the start of the back of the ba
Made of bass wood, backs rabbeted square, parch- ment hinge, sides smoothed, and ready for boring; see plate 1, figure 10 When rabbeted on beyel, as dotted line in plate, extra 0 6 When with an extra rabbet at the top end of back, extra Cleaning glue from inside of front- Glueing on check block previous to sawing; the grain of the wood crossing the front at right angles = 2000 crossing the front at right at right at right at right at right at rig

Trimming, pins furnished ready for the jacks - \$0 75 When the pins are put in at the back instead of the Block Levers Made straight from bass to treble, five-eighths to and a three quarters of an inch thick ;- the lower front data corner rounded, and sides left rough from the dealed saw, (see plate 1, figure S;) or when back end is left square, and hinge slip rabbeted in flush w- :: 0 50 Each bevel, when slip is rabbeted in flush, extra -0 3 Shaping front end to fit the sweep of keys -0 Beveling front end previous to sawing, to make room for back catch souther the active at the city in Planing sides and the product of the state of the second state of 13 A small flat champher on top side front end - 10 2 When made of pine or bass wood, deduct 12 per 11/1 When a large wheel and sufficient power are furnished for sawing, deduct Leading, when made of soft wood, one piece of the W lead in each; lead furnished ready cast -- 0 20 Ditto of hard wood - 0 25

## Levers for Keys, with Mouth-pieces.

Levers for mouth-piece keys, one-fourth to three-
eighths of an inch thick, hinge piece rabbeted in
flush, front end rounded, groove in both sides, and
straight from bass to treble; see plate 1, figure 9. 0 88
Sweeping front end to fit the sweep of keys, in-
cluding grooves - 0 12
Tapering 0 6
Damper Buttons,
With or without grooves for hinge, drilled for wire.
and left rough from the saw - 0 25
When made with a small triangle block connected
with the hinge, extra - 0 13
Smoothing sides

# Damper Heads.

Upright damper heads made of holly, round or octagon shape on the top, same width and height throughout, and cut to two thicknesses, grooved		
and drilled for wires; see plate 1, figure 11 - \$	0	38
When tapered from bass to treble, and numbered,		
extra	0	6
Clothing	0	13
Wiring	0	6
When wires are driven through, and filed off on		
front side	0	12
Flat Dampers, (as in plate 1, figure 12,)		
Made of two pieces of holly, or mahogany, top		
and the underniece grooved for cloth - 11 -	0	81
When ton niece is made similar to dotted line in		
nlate extra	0	13
Rounding front end previous to sawing apart	0	6
Clothing	Ő	13
Wiring	Õ	6
	. •	Ŭ
FRENCH ACTION		
· · · ·		

# Hinge Butts

Made of holly, in two thicknesses an eighth of an		
inch each; a groove across the centre of the top		
part leaving sufficient wood to form hinge; quarter		
round on front end, and back end square, with a		
groove in the under side of the top part near the		
end for centre pin; all cut the same width : sides		
planed, and bored for two screws: see plate 2		
figure 1	1	19
When back end of top part projects, and is heveled	T	10
as dotted line. extra	Δ	0
When made with a parchment bings outro	0	10
Clothing for centre nin	U	19
Clathing rot centre pill,	0	50
Diotning when top part projects and is beveled, extra	0	10
Futting in regulating screw, (round head)	Q	19

# Hammer Butts.

Hammer Butts, as in plate 2, figure 2, or similar		
shape, made of holly or mahogany, drilled for pin.		
and bored for shank	\$0	75
When made of apple or pear tree, or similar hard	•	
wood, extra	0	15
Leathering, with one piece of leather doubled in the	_	
groove, turned up, and glued in the rabbet	0	43
When the lower part is leathered and clothed, extra	0	32
Making and putting on paper punchings	0	50
Pinning and placing hammer butts in hinge butts -	0	31

## Hammer Heads and Shanks.

<ul> <li>same width at top and bottom, all bored in the same position, and the lower back corner rounded for back catch, (see plate 1, figure 1) the shanks made of cedar, rounded and cut to the length 0 88 When shanks are made of mahogany, extra - 0 06 When ditto are made of maple, or other hard wood, extra - 0 15 Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are made wider at top than bottom, extra - 0 12</li> </ul>	Heads tapered in height from treble to bass, cut the	
same position, and the lower back corner rounded for back catch, (see plate 1, figure 1) the shanks made of cedar, rounded and cut to the length 0 88 When shanks are made of mahogany, extra - 0 06 When ditto are made of maple, or other hard wood, extra - 0 15 Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	same width at top and bottom, all bored in the	
for back catch, (see plate 1, figure 1) the shanks made of cedar, rounded and cut to the length 0 88 When shanks are made of mahogany, extra - 0 06 When ditto are made of maple, or other hard wood, extra - 0 15 Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	same position, and the lower back corner rounded	4 - F 4 - F
made of cedar, rounded and cut to the length 0 88 When shanks are made of mahogany, extra - 0 06 When ditto are made of maple, or other hard wood, extra - 0 15 Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	for back catch, (see plate 1, figure 1) the shanks	
<ul> <li>When shanks are made of mahogany, extra - 0 06</li> <li>When ditto are made of maple, or other hard wood, extra - 0 15</li> <li>Glueing shanks in heads or hammer butts - 0 13</li> <li>Glueing shanks in both heads and butts - 0 62</li> <li>When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21</li> <li>When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25</li> <li>When heads are made wider at top than bottom, extra - 0 12</li> </ul>	made of cedar, rounded and cut to the length	0.88
<ul> <li>When ditto are made of maple, or other hard wood, extra</li> <li>0 15</li> <li>Glueing shanks in heads or hammer butts</li> <li>0 13</li> <li>Glueing shanks in both heads and butts</li> <li>0 62</li> <li>When heads are shaped as, or similar to, figure 2, plate 1, extra</li> <li>0 21</li> <li>When heads are shaped as, or similar to, figure 3, plate 1, extra</li> <li>0 25</li> <li>When heads are made wider at top than bottom, extra</li> <li>0 12</li> </ul>	When shanks are made of mahogany, extra -	0 06
wood, extra - 0 15 Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	When ditto are made of maple, or other hard	0 00
Glueing shanks in heads or hammer butts - 0 13 Glueing shanks in both heads and butts - 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	wood. extra -	0.15
Glueing shanks in both heads and butts 0 62 When heads are shaped as, or similar to, figure 2, plate 1, extra 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra 0 25 When heads are made wider at top than bottom, extra 0 12	Glueing shanks in heads or hammer butts	0 19
When heads are shaped as, or similar to, figure 2, plate 1, extra - 0 21 When heads are shaped as, or similar to, figure 3, plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	Glueing shanks in both heads and butts	0 10
plate 1, extra When heads are shaped as, or similar to, figure 2, plate 1, extra When heads are made wider at top than bottom, extra 0 25	When heads are shaped as, or similar to figure 9	0 04
When heads are shaped as, or similar to, figure 3, plate 1, extra 0 25 When heads are made wider at top than bottom, extra 0 12	plate 1. extra	0.01
plate 1, extra - 0 25 When heads are made wider at top than bottom, extra - 0 12	When heads are shaped as or similar to figure 9	0 21
When heads are made wider at top than bottom, extra 0 12	nlate 1 evtra	0.05
extra 0 12	When heads are made wider at ten then better	0 20
extra 0.12	when neaus are made wher at top than pottom,	0.10
그는 것 같은 것 같	exura	0 12
	an a	
Jacks.	Jacks.	

Jack Elyer made of mahogany, holly, or bass wood,		•
as in plate 2, figure 4, bored for pin and spring -	0	88
Tapering sides of Jack Flyer	0	12
Making ditto of apple or pear tree, or similar hard		
wood, extra	0	18
Preparing channel for spring,	0	25
Leathering with two pieces of leather on the top		
side, and one of ditto continued over the end	0	38

When the top piece of leather is continued around on the underside, or for putting a piece of leather on the lever bottom, extra assessmention as a - \$0 12 Making and putting in sprngs and putting in sprngs and putting in sprngs 0 50 0 75 Lever bottom made of mahogany, as in plate 2, figure 3, grooved with thick saw for flyer, drilled for pin and spring, and bored for two screws, 0 82 When made of holly, extra polyade in the growth of the 0 10 6 0 Countersinking seventy-three holes and the main this to Bushing holes, placing in flyer, and pinning pins 0 56 furnished ไซส์ของได้ ร้ายสารต่างเรื่องการเลือ control section Back Catches and all proved plantic Made of three pieces of leather, the wires flattened and glued with the leather, and cut apart with a punch, or when made with a tapered block, drilled and wired, and leather glued on one side in the chiral 38 143 43 with community of an and stands and fill HORIZONTAL DAMPER ACTION. Damper frame, as in plate 2, figure 6, made of mahogany, bottom part three-eighths of an inch thick, or under, halved or lapped together, front end thickened up to form a rim, three-fourths of an inch or less in height, front part treble and extended, tapered and rounded for the Car State of 1 25 For each extra half octave Each additional cross-bar a motive adment our moment 0.12 Fitting a ferule on treble end of frame, 0 9 Plain scallops on top edge of ends, quarter inch thick or under, each scallop Each additional quarter circle, construction county to 72 0 2 Each square is a rate word in our it sound is sound in a rout in the sound in the sound in the sound in the sound is a sound in the sound in the sound is a sound is a sound in the sound is a sound Damper cover, one piece of three-eighth mahogany, suitable sweep, ends square, and routed for cloth, When ditto is made with a piece glued on under the side of back edge, and ends extra the to call have the **0** 15

Rounding ends of ditto each end
Making a bracket for the frame, see plate 2, figure 7 0 10
Damper butts, as in plate 2, figure 8, made of ma-
hogany, one and three quarter inches long or
under, quarter round on each end, grooved with
thick saw for shank, and bored for nin and screw 0.50
When made of holly extra -
When made of apple or pear tree, extra
Bushing holes placing in shanks and pinning
Damper shanks as in plate 2, figure 9, made of ma-
hogany, not over eight inches long at the bass
(in the sheet) (
Each extra inch in length and the termination of a
Sawing apart and planing sides 0.22
Drilling pivot hole
Boring and leading
Making and putting on paper punchings - 0 40
Making damper heads as in plate 2, figure 10,
clothing previous to sawing and left rough from the
saw $(1, 1, 1, 2, 2, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,$
Smoothing sides of ditto
TOP DAMPER LEVERS FOR SPRINGS.
Made of thin mahogany, with parchment hinge
grooved in, not over six inches long at hass, and
three at treble. A half round on back end and
small half round piece on top side with a groove
or channel in it for the recention of the spring - 1 19
Hinge butts from three-fourths to one inch long
the same thickness as the levers with hinge
olued in the states as the levels, with hinge
Boring for one screw in each
Bee plate 2, ngure 1.
CABINET AUTION.
Hammer rail made plain and straight, with a tongue
glued in, and brass plate fitted and screwed on and
grooved for butts, $      300$

#### 64

Making hammer butts of mahogany as in plate 2,		
figure 13	<b>\$</b> 0	75
Drilling butts for shanks, regulating screw and cen-		
tre pin	0	<b>3</b> 4
Bushing centre hole with cloth	0	38
Putting in regulating screws	0	37
Making regulating screws of brass wire	0	50
Making regulating pins and a grad of the state	. 0	12
Making and drilling jockey heads	0	87
Making hammer heads and shank heads as in plate	•	
2, figure 12, the shanks rounded and glued in the		
heads, and the heads numbered	1	50
Making dampers as in plate 2, figure 14	1	50
Clothing dampers	0	50
Making levers or under hammers	0	62
Planing sides of ditto	0	6
Tapering sides of do - side and the set of the side of the side of the set	· 0	13
Leathering ditto	· 0	75
Preparing and jointing stuff for stickers	0	25
When less than five sets of action are made at one		
time, the journeyman is to be allowed an addition	-	

of ten per cent. to the foregoing prices. 

KEYS.

nedit dasmissen din gaspetism old is dia A set of six octave horizontal keys. Longest key one foot eleven inches in length or under, and shortest key one foot four inches in length or under. Key-board made of bass wood, and threequarters of an inch thick or under. Front edge slipped with holly or plain maple, to be either moulded or left plain; a rabbet on the back edge. The keys to be straight from the ivory to the back end; the underside of sharp keys scalloped. The front end of ivory rounded, and the keys numbered. The sharps to be made of half inch stuff; the sides and front end beyeled. The frame to be halved together, and to have three sources? cross-rails; the front and balance rails to be made

of cherry; the end, cross, and back rails to be made of half inch pine on other soft wood; the balance and back rails to be made straight. - 56 25 Start • \* • • • • • • • EXTRAS. 1 p to 17. ... Matching ivory - - - - - - - - - - - 0 31 Rounding edges of ditto 77- 200 - 200 - 100 - 20 Polishing edges of ditto Buttons made of bass wood 600 and a labor and a constant of 62 Rounding front end of sharps and a called the other of 15 Rabbeting treble keys for jacks and the open of the 0.6 When the rabbet extends to the back end of keys - 0 12 Each extra crook in keys - - - - - Each extra inch in length of keys above one foot 0 25 eleven inches, to two feet one inch - - -7 0 Each inch above two feet one inch - 0 12 Each additional key 0 12 When keys are made with mouth-pieces in place of a rabbet ..... qui bout 1 on the full state that the full of 0 50 When mouth-pieces are made on a sweep, to be colline extra from straight - - - - - - - - - - - 0 13 For putting in cross-band, in place of slip over front holes Each slip let in on the under side of key-board for holes or mortices When front slip is made of curled or bird's eye maple 0 16 For each extra sixteenth of an inch in thickness of key-board - 0 18 When the back end of key-board is made on a sweep 0 6 When the key-frame is mortised and tenoned together, instead of being halved - 0.16 When the cross rails are tenoned in the frame, each rail 0 3 When the back rail is made on a sweep -100-20 When the balance rail is made on a sweep -100-27 When the balance rail is made on a sweep Each additional cross-rail - 0 6 When cross-rails are made of cherry or mahogany, and a to be extra, each a faile and with an an and 0 2

9

When end and back rails are made of cherry -	<b>\$</b> 0	13
When front and balance rails are made of maple,		
beech or birch	0	12
Scalloping natural keys	0	9
Sawing ivory, each set	0	62
Do. do, when a man is furnished to turn the		
large wheel, each set	0	37
Any workman not having a steady job at keys, ma-		
king less than six sets at a time, to be extra		
twenty-five cents each set, provided there be not	1	
less than four sets. If less than four sets, to be		
extra thirty-seven cents each set, if there be not		
less than two sets and if there he hut one set		
made at a time to be extra fifty cents		
made at a time, to be extra may conto.		
DEDUCTIONS		
When key-boards are furnished faced over and		
alued up	0	31
When ditto are served out and iscked over	0	10
When key frames are furnished glued up	0	60
Ditto when finished ready for planing to the touch	0	75
When sharing one furnished	0	10
When sharps are furnished	0	44 σ
When keys are not numbered	U	· J
when stuff for norizontal key-frames is furnished	•	•
sawed out	0	- 9
Ditto with balance and back rails on a sweep .	0	12
Cabinet trames sawed out	: U	6

## **GABINET OR PICCOLO KEYS.**

6

A set of six octave cabinet or piccolo keys, one foot five inches in length or less. Key-board made of bass-wood, and three-quarters of an inch thick for under; front edge slipped with holly or plain maple, to be either moulded or left plain; the under side of sharp keys scalloped; the keys to be numbered; the front end of ivory rounded; the sharps to be made of half inch stuff, the sides

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and front end beveled; the frame to be halved together; the front and balance rails to be made of cherry; the end and back rails to be made of half inch pine or other soft wood. Start .

. \$5 87 ( ) ( **)** 

#### EXTRAS.

Each extra inch in length, above one foot five inches, to one foot eight inches to the state of the state of 0 17 Each inch above one foot eight inches that we 0 12 For other extras, see horizontal keys.

# FINISHING OR PUTTING IN ACTION.

#### Action, No. 1.

For finishing a six octave Piano-forte, with fifty-six upright or horizontal dampers, short soundingboard, with plain English action, and twenty-four or less keys under the sounding-board, block lever and upright dampers with straight socket, a quarter of an thick or under, key-frame cut in two parts, and cheeks screwed on edges of ditto, the upper hammer-rail to be supported by two wire pillars. Rabbeting, clothing, setting, blocking, and screwing down key-frame, rabbeting, clothing, and leathering the edges of rails, easing, spacing, and leveling keys and clothing the ends of ditto, hanging and slipping upper and under hammers, and cutting upper hammers to fit strings, fitting in clothing and boring socket; glueing on damper buttons, cutting damper wires to a length and screwing them in, hanging and slipping damper levers on rail, and screwing or hinging ditto to pine block, fitting, regulating slip and screwing it on, regulating hammer fall, planing the under side of hammer rail, and clothing ditto for back touch, mortising keys for jacks, cutting in, glueing in, filing and black leading ditto, and letting off hammers.

Start .

8 68

FYTBAS
T the leads furnished cast \$1) 63
When keys, more than three leads on an
everage, to be extra each set
Leveling bottom of case 0 25
Grooving keys under sounding-board for jacks . 0 12
Letting upper and under hammer rails in four cheeks 0 25
Glueing on hammer heads, each 0 1
Ditto when with brackets, each bracket $\mathbf{r}$ $\mathbf{r}$ $0$ $6$
Glueing check blocks on jacks and additionation of 50
Notching the socket
When damper levers are stopped by the hinge slip,
and dampers similar to dotted line, plate 1, ngure
Putting in a lever spring and leathers for finish
Cutting all cloths, punchings, and leathers for minist-
Ing, each set
When ditto is made on a sween, as in plate. No. 8.
figure 8
Making an under hammer-rail as in plate. No. 3.
figure 2
Making plain square cheeks as in plate, No. 3,
figure I, each
Getting socket out of thin stuff, and planing ditto
on both sides
Getting ditto out of thick stuff and planing it on both
sides
Making regulating slip with five mortises, as in plate
No 3, figure 4
Making a lever hinge slip
Ditto an under nammer ninge sip
Ditto a rall for mouth piece levels with two mortices 0 to
the front champhered and the ton slip
When ditto is made in two parts in the the length 0 20
When the hinges for lever rails are sunk, extra each 0 8
Cutting sharps and cleaning keys
Stringing a unicord case without eves . 0 37
Ditto ditto with eyes 0 75

proportion to the foregoing prices.

# Action, No. 2.

For finishing a six octave Piano-forte, long sounding-board, the dampers the same as No. 3, and all other parts the same as No. 1, except cutting apart the key frame.

Start - 9 38

#### EXTRAS.

Putting in back checks when ditto are furnished 40.0.37 Making the key frame to slide in with three brass plates, screwed on the under side of front rail for paper screw heads to work into, the balance rail grooved allost out to pass over screw heads, extra from blocking a vit Putting in a wire handle through the front rail, to determine Leathering or black-leading the heels of upper hammers de la cella des fine de la des de la 25 Putting in wood pillars instead of wire ones, extra short each - the the minimum and a start with a to 0 3 Each extra wire pillar and the second of such as 0 3 Putting in top hammers with hinge butts, when dive hammer butts are made as in plate, No. 1, Figure 3 or 7, extra 1- establisher with galance ( + ) 1 25 When cheeks are made as in plate, No. 3, figures et al. 2, 3 and 4 to be extra from figure 1, each - and 0 Making a sweeped hammer rail of mahogany, as in '1 (1) plate No. 3, fig. 5 Halade ta harrow Calledge (19:0 12 Ditto, when made of maple - 10. - 10. - 0 19

Making a straight rabbeted upper hammer rail, as in	
plate No. 3, figure 6, with scratch bead on both	
edges - The discrete and the state of the set of a \$0	19
Ditto on a sweep 0	61
Making a straight hammer rail, one inch and a	
quarter thick or under, glued up in two pieces, as	
in plate No. 3, fig. 7 (1994) between $2^{-3}$ in $2^$	19
Ditto on a sweep and all reliable in and average a - 0	40
Making an under hammer rail straight, as in plate	•
No. 3, figure 3 - 6 - 6 - 6 - 6 - 6 - 0	18
Ditto, on a plain sweep 0	31
Ditto, when made with two breaks 0	40
Making a pine slip for hammer rest 0	6.

#### Action, No. 3.

For finishing a six octave French action Piano-forte, with fifty-six upright or horizontal dampers, long sounding-board, rabbeting, clothing, setting, blocking, and screwing down key-frame, screwing on cheeks, letting in and screwing on rails, or dovetailing and glueing them in, and ditto supported by four-wire pillars, clothing the rails and screwing on butts, cutting the hammers to fit strings, easing, spacing and levelling keys, fitting hammer rest, and boring and screwing regulating screws in ditto; the keys to have cloth or leather glued on the back ends of them, and ditto morticed for jacks, or bored for lever bottoms, glueing in jacks, or screwing them on, cutting in and black-leading ditto, and putting in back checks. When finished with upright dampers, forty-two to pass through a socket a quarter of an inch thick or under, and fourteen passing through bridge on long block. the wires of ditto bent to extend over three notes. and screwed in damper buttons, and ditto glued on the top side of the damper levers, levers glued on rail, and ditto screwed or hinged to pine block : or when finished with flat cap dampers, with heads glued on ditto, and screwed in buttons, and ditto glued on top side of damper levers, levers glued on rail, and ditto screwed or hinged to pine block. When finished with horizontal dampers, the frame to lay over strings, and centered in damper eye tapped in the plate; the bass end of the frame supported by a bracket, and centered in ditto, or the frame hinged to long block, boring and clothing frame, and screwing on butts, and damper heads glued on levers, boring and clothing long block, and cutting damper lifters to a length, clothing damper cover for upright or horizontal dampers, and letting off hammers.

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Start	2 a g 🕶 🖓 🛨	i se statiste	-	 <b>₩</b> ,	. <b></b> .	-\$11 37

#### EXTRAS.

Each extra half octave more than six -	300 °	-	2 0
Glueing shanks in butts, or heads on shanks	-	-	0 50
Counterbalancing keys	-	-	0 25
Rabbeting cheeks to make room for keys, each	h ch	neek	0 12

## HARP OR BUFF STOP.

For putting in a harp or buff stop, with slip shaped to hammers and rabbeted, cloth glued on ditto, or buff slit to receive parchment, and slipped with morocco.

Start

## EXTRAS.

Getting out slips for harp stops, and shaping ditto to	
pattern, each	
Making a straight brass movement for treble, and	
with two holes in ditto $       0$ $6$	i
Putting on a lever spring 0 3	1
When ditto is let into bottom 5 6	j.

### ARTICLES THAT ARE TO BE FURNISHED FOR THE FINISHER.

All plates, pillars, hooks, screws, springs, wire handles, back checks, leather buttons, punched cloths and papers, cloth and leather cut for frames and rails, hammers leathered and heads glued on shanks, jacks complete, levers, dampers, and damper buttons clothed, leathered and leaded, and damper heads sawed apart, damper lifters tapped and leathered, damper frame, bracket and eye, damper cover routed or grooved for cloth, butts clothed, and shanks pinned and placed in ditto, butts and lever bottoms bored for screws, socket, rails and slips, straight or circular shaped for use, L's or T's and lever springs for ditto, cases to be strung, and the keys leaded; and in stringing cases, all rest-pins are to be furnished drilled; and all work that is leathered or clothed to be trimmed and cut apart.

Note.—For extras, not specified in either one finishing bill, refer to either of the others.

# TABLE, No. 1.

Each castor on turned work, fitted by the turner	12
Ditto when partly fitted by the file	2
Each square socket castor shouldered on square legs &c.	
Each square socket claw castor let in on three sides	
Ditto a lion's paw castor let in on three sides	)[-
When the underpart of the socket is let in, extra	
Each round or square plate castor under a paw, &c. 4. 500 (1997) 3	<b>3</b> -
When the plate of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the first of the custor is let in overal with the custor is let in overal with the first of the custor is let in overal with the custor is let in overal wi	•
When the castor is let in, or sunk near the whole denth of ditto	•
extra from putting on castor . and lat zie there and a start of 7	1
Sinking a round or square plate castor under scroll feet, each 18	3
Each drawer or door lock, and thread escutcheon and the provide 9	) ·
Each box lock, and thread escutcheon, without the catch	3
Letting in a tube lock, to be extra that - a solution of the solution of 99	)
Letting in lock plates hush, each	3
Fitting the catch to the above locks extra	5
Each mortise lock, and thread escutcheon on ogee, or cylinder	£.
falls, when the key-bottom is rounded on front edge	5
Fitting the catch to ditto lock the sold en added with tobl ? That C 12	2
Each extra thread escutcheon let in .	$2\frac{1}{2}$
Making and letting in an oval wood escutcheon on flat work	7
Ditto, ditto, a diamond escutcheon on flat work	5
When the above escutcheons are let in on sween work extra	ອິ
When a wood escutcheon is made on a sweep in the thickness, extra	6
When escutcheons are made of brass, to be extra three-quarters, on	
flat work.	- 53
Each drawer handle, with one pin and nut	21
Ditto, ditto, with two pins and nuts	31
Letting in the nuts of pins, each	1,
Each turn buckle for a deer	13
Each extra butt hinge in a ton &c the table is a start of the	0 7
Each extra back hinge	8
Turning a hinge to be	ĩ
Preparing a pin for a hinge, with a crook in ditto, extra	11
Ditto when made by the dozen, each	1
For filing and lackering hinges, each	3
A flush or thumb bolt, six inches long, or under	9
w nen locks or catches are let into work that is varnished, to be one	
quarter, extra.	-
10	

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#### TABLE, No. 2.

## PRICE OF FLAT AND GROOVED JOINTS.

When joints are grooved, to be extra one half. When joints are grooved on both edges with a loose tongue, long or cross ways, to be extra double.	Pine or white wood, one inch thick or under, flat.	Each extra half inch in thickness of stuff.	Mahogany haif inch thick or under, flat.	Each extra balf inb in thickness of stuff.
A joint one foot long or under	Cents. 3	Cents.	Cents. 4	$\frac{Centr.}{\frac{1}{2}}$
Above one foot to two feet long	4	12	5	1
Above two fect to two feet six inches	41/2	12	61	1
Above two feet six inches to three feet	5	34	8	11
Above three feet to three feet six inche	• 5 <u>1</u>	84	91	14
Above three feet six inches to four fee	<b>t</b> 6	n standing and a	110	13
Above four feet to four feet six inches	6 <del>1</del>	1	•13	12
Above four feet six inches to five feet .	7	11	15	2
Above five feet to five feet six inches .	8	$1\frac{1}{2}$	17	2
Above five feet six inches to six feet .	1997. 1997. <b>19</b> 17. 19	2	19	21/2
Every six inches more in length	1\$		21/2	1

When pine and hard wood are jointed together, take half of each price, for the price of ditto.

The extra thickness to be charged, when one-eighth above the start

thickness; as, inch and one-eighth, inch and five-eighths, fiveeighths, &c.

- Joints of rose, zebra, or similar hard wood, to be extra one-quarter of mahogany.
- Joints of satin wood, to be extra one-half the price of mahogany.

\$0 5

Each tongue and two mortises in a joint When a piece is jointed on a top, on a lock-board, &cc. only two inches wide or under, to be extra one-sixth on the table.

Ditto, ditto, ditto, on the end of a lock-board, &c. see table of clamping, No. 21.

For mitreing ditto clamp, to be extra one-third the mitre in table. of filleting, No. 7.

Working of slabs to be paid according to time.

## TABLE, No. 3.

# PRICE OF GLUEING OR THICKENING UP STUFF.

and the second		1.11	1111111111	- 17 C B (C 4 1
When hard wood and pine, &c are glu- ed together, take the half of each price for the price of ditto.	Pine or white wood, 3 inhs. wide or under.	Each extra inch in width of joint.	Mahogany, cherry, or ash, three inches wide or under.	Each extra inch in width of joint.
Each joint 1 foot long or under	Cents. - 4	Cents,	Cents, 8	Cents.
Above 1 foot to 2 feet long	5		0.1904 01. <b>9</b>	- 27667 - 97 <b>11</b>
Above 2 feet to 2 feet 6 inches	6 <u>1</u>	:/ spd9	10.5-11 10	0 87967 1 279 <b>12</b> -
Above 2 feet 6 inches to 3 feet	71	11	12	2
Above 3 feet to 3 feet 6 inches	9	13	14	21
Above 3 feet 6 inches to 4 feet	10	2	16	3
Above 4 feet to 4 feet 6 inches	12	2	18	31
Above 4 feet 6 inches to 5 feet	14	21	21	4
Above 5 feet to 5 feet 6 inches	16	21	24	41
Above 5 feet 6 inches to 6 feet	18	3	28	5
Every 6 inches more in length	2 <u>1</u>	11	41	21
	· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , , ,	

served require glow with no brack, th

Glueing up with maple, to be double the hard wood price.

When dovetailing is cut into any of the hard woods, to be extra oneeighth of the full price for each end; but this not to apply to other prices that are fixed.

When the stuff for the above joints is furnished cut out, to be one-sixth less than the above table.

When more than one joint is glued up at a time for one piece, to be one guarter less than the table.

When on round work, plain Above Above Above Above Above 6 to 8 8 to 10 10 to 12 12 te 14 Four Above Every sweep, to be extra 2 thirds inches 4 to 6 14 to 16 wide or inches inches inches inches inches inches Inches When on hollow, or elliptic, under. wide. wide. wide. wide. wide. wide. wider. to be double. Cents Cents Cents Cents Cents Cents Cents Cents Six inches long or under 4 5 6 7 8 9 10  $1\frac{1}{2}$ Above six inches to one foot 5 6 7 8 9 10 11 13 Above 1 foot to 1 foot 6 in. 7 8 6 9 10 11 12  $1\frac{1}{2}$ Above 1 foot 6 inches to 2 ft. 7 9 8 10 11 12 14 2 Above 2 feet to 2 feet 6 in. 9 8 10 11 12 14 16 2 Above 2 feet 6 inches to 3 ft. 10 9 11 12  $2\frac{1}{2}$ 14 16 18 Above 3 feet to 3 feet 6 inhs. 11 12 10 14 16 18 21 3 Above 3 feet 6 inches to 4 ft. 12 11 14 16 18 21 3 24 Above 4 feet to 4 feet 6 in. 12 '14' 18 21 16 24  $3\frac{1}{2}$ 26 Above 4 feet 6 inches to 5 ft. 14 16 21 18 24 26 28 31 Above 5 feet to 5 feet 6 in. 16 18 21  $\mathbf{24}$ 26 28 31 4 Above 5 feet 6 inches to 6 ft. 21 24 26 18 28 31 34 4 Every six inches longer 3 2 3 33 31 4 4 .... Cleaning of buhl work, ten 10 9 12 11 inches long or under. 2 23 3 13 Every four inches longer. Veneering with crotch, to be double the price in the table. Ditto, ditto, rose wood, zebra, maple, and similar hard wood, ‡ extra. The buhl work, on hollow or round work, to be entitled to the price of ditto, as provided in the margin for veneeriug. Preparing and glueing on a veneer, to show a raised panel, forming a break all round, to be extra on the table one-half. 10.3% where 1Ditto, when to show a break on one side only, to be extra 4. Rabbeting away a veneer to receive mouldings, &c. the edge of -ditto for a joint, at per foot 80 2 Ditto, on the solid, to receive work, the edge of ditto, made for a joint, at per foot . 0 4 Shaping the sweep edge of a veneer, when ditto is shaped by it. self after it is glued on the work, at per foot, extra from the straight edge of the above table i en internet i grandel i anternet. 02 Shaping the edge of a veneer to an internal corner, each corner 0 1 When a veneer is cut off, and to match at a corner, one foot long or under -0 21 Ditto, when above one foot to one foot six inches long 03 Ven'g with maple root, or similar veneer, to be extra, above crotch 1-8th. When the buhl work is of brass and wood, the cleaning off of ditto, to be exrra one-third. Work starting veneered, the crotch price of ditto to be only the face of the table. Circular work, to measure on the sweep, for length and width of ditto.

TABLE, No. 4.—PRICE OF VENEERING.
Butt joints, in crotch, to be extra double. Long way joints, in crotch, to be extra two thirds. Joints, in satin wood, or maple, extra double. Joints in coloured wood to be as per table.	On flat work.	On sweep work.	Butt joint on flat work.	Ditto on sweep work.
A joint 3 inches long or under	Cents.	Cents.	Cents. 4	Cents. 8
Above 3 inches to 6 inches long	2	3	7	11
Above 6 inches to 9 inches long .	3	4	9	14
Above 9 inches to 1 foot long	1.592576 2.127 <b>4</b> 11 1.177 <b>15</b> 11	6	11 11 57	17
Above 1 foot to 1 foot 3 inches	5	. 97	14	-20
Above 1 foot 3 inches to 1 foot 6 in	6	81	17	24
Above 1 foot 6 inches to 1 foot 9 in.	8	11	20	28
Above 1 foot 9 inches to 2 feet long	10	13 1 000 13 1	23	32
Above 2 feet to 2 feet 3 inches	11	14	27	
Above 2 feet 3 inches to 2 feet 9 in.	todoci 1 <b>3</b>	16	31	n de Land Ten Land
Above 2 feet 9 inches to 3 feet 3 in	14	18		
Above 2 fact 2 inches to 2 fact 0 in	-15	20	i di seri	<b>.</b>
Above 3 leet 3 miches to 3 leet 9 m.		20	a 1 1.	ti gring
Above 3 feet 3 inches to 4 feet 6 in.	17			
Above 4 feet 6 inches to 5 feet long .	18	sintes Seti		
Above 5 feet to 5 feet 6 inches	19	i et do Sate		
Above 5 feet 6 inches to 6 feet long .	21			
Mitreing veneers on frames, &c. where the edge is not jointed, the mitre 3 inches long or under	3 <u>1</u>	1.1.1.1.C		
Above 3 inches to 6 inches . : .	4 <u>1</u>	6		
Above 6 inches to 9 inches	6	$7\frac{1}{2}$		
Above 9 inches, to be at per foot	7	81/2		

TABLE, No. 5.—Price of Joints in Veneers.

77

Mitreing veneers in the thickness to be the same price as butt joints. Cutting off a veneer, and matching ditto, at a corner, one foot long or under . \$0 21 Ditto, when above one foot, to one foot six inches long, as on a pillar, where the veneer breaks round a corner, long or cross ways

## TABLE, No. 6.—PRICE OF BANDING; LONG, CROSS, OR FEATHERED.

Bending with crotch, to be extra on the table,	On the	When	Uitto on	Each	Ditto, on
double. Ditto, with satin wood, or maple,	tops, &c.	is jointed	work, &	the flat.	of top,
extra one quarter. Rose wood, zebra, or simi-	when the	and rab	rabbet-	or end-	&c.in the
mahogany Banding on holiow work to be	not joint-	away the	the band.	ways in the thick	thickness of veneer
extra one quarter of the round price per foot.	ed.	vencer.		Dess.	
	Cents.	Cents.	Cents.	Cenis.	Cents.
Banding with shaded wood, on straight			1 <b>.</b>		
work, 4 inch wide or under, at per ft.	. 91		.51	11	
Ditto, above 1 in, to 1 in, wide, per foot	22	11	6	13	11
Ditto above 1 in to 14 inch wide	21	1.5	61	14	14
Ditto above 11 inch to 2 inches wide	. 07	51	7	01	1
Ditte above 15 men to 2 menes whee.	4	02		24	14
Date above 2 menes to 25 menes	42	0	0	21	24
Ditto, above 24 inches to 3 inches	5	7	9	3	$2\frac{3}{4}$
Ditto, above 3 inches to 31 inches .	51	8	10	$3\frac{1}{2}$	31
Ditto, above $3\frac{1}{2}$ inches to 4 in. wide .	6	9	11	4	$3\frac{3}{4}$
Banding on the front of round work,			1.2.2.1		1
half inch wide or under, at per foot .	31	51	17	13	17
Ditto, above 1 inch to 1 in. wide per ft.	4	6	71	21	11
Ditto, above 1 inch to 11 inch wide	41	: 61	8	91	13
Ditto above 11 inch to 2 inches wide	5	7	à	2	6
Ditto, above 2 inches to 21 inches	51	<b>P</b> 1	10	0	
Ditto, above 21 inches to 25 inches	07	12	10	42	27
Ditto, above 25 inches to 3 inches	0	8	11	6	3
Ditto, above 3 inches to 34 inches	1. 7	91	12	7	$3\frac{1}{2}$
Ditto, above $3\frac{1}{2}$ inches to 4 inches wide	8.	$10\frac{1}{2}$	13	8	4
Banding on the top of sweep work,					
where the edge of band is sweeped,		1. 63 8.	1 24 5	. A C	$c_{1}, c_{2}, c_{3}$
half-inch wide, per foot	5	81	$10\frac{1}{2}$	13	
Ditto, above $\frac{1}{2}$ in. to 1 in. wide at per ft.	51	9	11	2	1.1.1
Ditto, above 1 inch to $1\frac{1}{2}$ inch wide $\therefore$	6	91	114	21	
Ditto, above $1\frac{1}{2}$ inch to $\overline{2}$ inches wide.	61	10	12	21	
Ditto, above 2 inches to 21 inches	71	111	13	32	1.000
Ditto, above 24 inches to 3 in. wide	- 81	10	114	21	
Each half inch more in width of hand	1	14:	11	1	a de serve
		-	14	2	•
Each break or stop, in banding, 4 in.	wit .	drie	Jogra (	1.50	1.10
deen or under extra from measure.		min		1.7.1	
ment			10	in their	ALC O
Banding a hallow or round corner ditta	U K	0	. 12	1 A	
A aquare internal corner 2 in dean or	. 5 .	7	6.9		1994 - A. A.
A square internal corner, 2 in. deep, or					
under, extra from mitres	· 0 ·	5	- 7	요. 변렬 오	and a second
Ditto, above 2 in. deep, extra irom mitres	0	6	8		
Matching crotch band on hollow, or		n la f	01.5	140-4	ana 4
round corners, each corner extra	11	6	6		
Matching the mitres on square corners,		, F			45. S.F.
extra	1	4	4	19 S.Y	19-10-10 19-10

### REFERENCE

. A

### TO THE

### TABLE OF BANDING.

Matching crotch band, or shaded wood, at per foot Rabbeting away the veneer or band for a fillet, mouldings, &c. the edge of ditto straight to a joint, at per foot Mitreing the edge of band, shaded wood, at per foot For rabbeting on sweep or solid work, per foot, see table of filleting. Rounding band, and banding with thick stuff, rounding ditto, &c. see when a band is glued on the surface, forming a square on the inner Turning corners with banding, to be half the price of mitres. succession When long band, where the edge is not jointed, exceeds 4 inches wide, the price to be taken from table of veneering. When a panel of band measures only one foot six inches or under, to be extra one quarter. and a geometric state of a balance design and a set of When breaks and fitting in corners are on hollow or round work, to be extra one quarter. extra one quarter. When a top is vencered on both sides, and banded only on the upper side, the price of band to be extra one half, on the second column in the table. Banding with maple root, or similar veneer, the price of ditto in the first column to be extra above that of crotch, one half of the crotch price. Ditto, ditto, in the second column, extra above that of crotch one half of ditto.

Ditto, ditto, in the third column, extra above that of crotch, one-eighth.

### TABLE, No. 7.—PRICE OF FILLETS.

Fillets in the table to be one-eighth of an inch thick or under. Fillets made of satin, maple, king, rose, or similar hard wood, to be extua one-third; ebony, ex- tra one-half. Fillets glued on elliptic, or quirk sweeps, extra one-fifth. Mitres on hollow or work, extra one-quarter. Butt joints to be half the price of mitres.	On the surface of straight work.	Ditto, hollow or round work.	On the top of sweep work, or where the edge is sweep d	Each break or stop in the fillet or rabbet- ing.	Each mitre on the flat or in the thick- ness.
Ajsquare panel that measure two feet of fillet or under, half inch wide or less, but-	Cents.	Conts.	Cents.	Conts.	Cents.
ted at the corners of panel on rims, &c.	18	24	28	0	0
Each extra foot in length of fillet, at per ft.	4	5	6	2	$1\frac{1}{2}$
Each extra quarter of an inch in width of					
fillet, at per foot	12	17	11	12	1
Each extra one-eighth of an inch in thick-	1. agi		Sam	(a,b,c)	
ness of fillet, at per foot	2	$-\frac{1}{1200}$	12	0	0
Dillering and the survey in Lord terms	1.25	1.12.10.	10:40	22,80	Color I.
Raubeling away the veneer, or band, to re-	1	111		4.	
Ceive the linet, half inch wide, at per loot	0	31		11	0
Ditto another and an another of an inch in	<b>.</b>	02	42	12	
Ditto, each extra one-quarter of an inch in	111	1	្នែរ	0 194 <u>1</u> 71	
When the filet former a serell at the and of a	4	2	.: <b>4</b>	· 2	
when the milet forms a scron at the end of a	2	A		· • •	0
When a stump or black from is proceed to	r Satt	1.00		U	, v
when a stump, of block, e.c. is grooved to	1.00	Giiŵ	trous	00.20	ann'.
continue the miet across titto, extra caon	2	21	0	0	0
	1.	-2		U	, i.
1000000000000000000000000000000000000	1.14	•. 4h.	37.304	0.249	1
<ul> <li>Second and the second se</li></ul>	10	15		1.1	1, 1, 1, 1, 1
Each internal square-cornered end, extra	12	18	as p		. X 9 
Ditto, nollow-cornered end	11	16	13 A 12	ುಂಗಿದ್ದ	ant de
Ditto, nollow or round end	14	21	1.9 p	ាថ់ វ	1.59
Ditto, astragal or goinic end	18	27	n ni a	1 8	ONF.
Ditto, double ogee end without mitres.	Los I.	ectiv	HOTH	nija .	148

The above shaped ends are extra from measurement and mitres."

For veneering fillets in a whole piece, see table of veneering. I vice

Ditto, ditto, when cross ways, the joints to be extra, as per table of ditto. For banding fillets separately, see table of banding, first column.

When the shaped ends or corners are fitted up to a joint in a rabbet, extra one-quarter.

When a veneer or band on a fillet forms a square on ditto, the band to be charged as a fillet.

When the edge of a fillet is moulded, see table of mouldings for price of do. When fillets are made of crotch, to be extra on the table one-half.

# 81 TABLE, No. 8. Price of Stringing Per Foot, and Forming Panels with ditto, &c.

When square or shaped end panels are let into the round work, to be extra one-quarter of the single-string price. Ditto into hollow, or elliptic, one-third. Ovals or circles, on sweep work, extra one-third. Making strings of hard wood, extra one- quarter. The string in the table to be of holly wood.	A single string.	Each extra string.
Each square panel, that measures two feet of string or under . Each extra foot of string . Each break, cant, or round corner to a panel Each internal, or external square corner, each side Each hollow corner . Each half diamond or round end . Each half diamond or round end . Each half circle end, with two breaks, or double ogee end Each half circle hollow end . Each gothic end, hollow or rounding . Each half circle, six inches diameter, or under . Every two inches more in diameter . Every two inches more in diameter . Every two inches more in diameter . Each oval, six inches long or under . Each extra inch in length of oval .	Cents. 91 14 24 24 3 4 10 61 84 4 11 6 11 4 11 11 11	Cents. 31 03 1 1 2 1 3 2 1 1 2 1 2 1 2 1 2 1 2 1 2
Grooving in a string on flat or sweep work, from a straight edge, at per foot Ditto, from a sweep edge, per foot Each internal mitre, or stop, as in breaks in edge of tops, &c. Each external ditto, or on the flat of work	11 21 2 1 1 2 1 1 1 2	
A corner string on flat work, at per foot Ditto, on sweeped work, per foot Ditto, when sweeped both ways, per foot Each external mitre. Each internal ditto, including the break	$     \begin{array}{c}       2 \\       3 \\       5 \\       1 \\       \frac{1}{3} \\       2 \\       \frac{1}{3} \\      \frac$	8414 1484 15384
<ul> <li>Grooving in brass strings, to be three times the price of holly ditto.</li> <li>Mitres in brass string to be double:</li> <li>When strings are cut off sheet brass by the workman, to be extra, per foot</li> <li>Turning corners or butt joints, to be ½ the price of mitres</li> <li>When brass strings exceed an eighth of an inch, to be extra one-half the brass price.</li> <li>When wood strings exceed an eighth of an inch, to be extra double the wood price.</li> </ul>	時間の「	2 ) (2 ) (2 ) (3 ) (3 ) (3 ) (3 ) (3 ) (3 ) (3 ) (3

a sein

### TABLE, No. 9.

### Price of Working and Glueing on Mouldings, and Veneering ditto.

	the second se				
When done on hollow or elliptic work, to be extra on the price of round work, one-half. Butt joints to be half the price of mitres. The mouldings to measure on the face for the width, following the shape for ditto. Veneering with crotch, to be extra one-half	A champ- be red mould- ing 3-4 of an in. wide or under.	A hollow or round, 3-4 of an inch wide or under.	An oges mould- ing, 1 inch wide or under.	Each extra bollow or round lin mould- ings,	Each square in mould- ings, extra.
Making and glueing on straight work mouldings, at per foot . Each extra 1 of an inch in width of ditto Making and glueing on round work mould- ings, at per foot . Each extra 1 of an inch in width of ditto	Conts. 7 1 10 3 4	Conto. 71/2 1 13 1	Conto. 10 11 12 19 2	Cents. 31 34 34 54 14	Conts. 11/2 21/2
Veneering straight mouldings, long or cross ways, at per foot • • • • • • • • • • • • • • • • • •	$     \frac{7}{12}     \frac{1}{2}     \frac{3}{4}   $	$   \begin{array}{c}     10\frac{1}{2} \\     1\frac{1}{4} \\     18\frac{1}{2} \\     1\frac{1}{2}   \end{array} $	$   \begin{array}{r} 15 \\ 1\frac{1}{2} \\ 28 \\ 1\frac{3}{4} \end{array} $		
Making and glueing a quarter circle piece on a round corner of 12 inches diameter or under Ditto, ditto, piece of 12 inches diameter, on a hollow corner Each extra $\frac{1}{4}$ of an in. in width of moulding	14 15 1	15 16 1	18 20 1 <sup>1</sup> / <sub>2</sub>	4 <u>1</u> 5 <u>1</u> 1	2 3
Veneering a quarter piece of 12 inches diameter, for a hollow or round corner . Each extra $\frac{1}{4}$ of an inch in width of veneer	71/2	21 1	25 1 <del>1</del>		
Each mitre in mouldings • Each extra half inch in the width of mould ings, the mitres to be extra	3	3 <u>1</u> 31 31 31 31	5 1		

The joints in veneer, or band, on the champhered moulding not to be charged as extra, when the band is under inch and a half wide; when over that size, see table, No. 5.

As all mouldings consist of squares, champhers, hollows, or rounds, and ogees, it was thought unnecessary to have a plate of mouldings.

When a panel measures only two feet or under of hollow, round, or ogee moulding, the veneering of ditto to be extra one-fifth of the full price.

### REFERENCE TO TABLE, No. 9,

A

### OF

### MOULDINGS, &c.

A square solid cap-piece, three inches wide or under, fixed on the
top of cornice, at per foot
Each extra inch in width of cap-piece • • • • • • • • • • • • • • • • • •
Pitching the cap-piece, at per foot
Champhering the cap-piece, two inches wide or under • • • • • • • • • • • • • • • • • • •
Each mitre in square cap-piece • • • • • • • • • • • • • • • • • •
Ditto, when the cap is pitched
Making and glueing on a plain square plinth on bottom, at per foot 0 9
Each mitre in plinth
For mouldings on a solid plinth, &c. see table, No. 10.
Grooving in a band, or veneer, endways on the edge of frames, to
receive a moulding, at per foot
When hollow, round, or ogee mouldings, are made elliptic on the
face of ditto, extra one-quarter.
Veneering ditto, ditto, mouldings made on the elliptic, extra one-
quarter.
Veneering the quarter circle champhered moulding, the crotch
price of ditto not to be charged.
When moulding is worked cross ways, to be extra on the table
one-quarter.
When mouldings are made of crotch, long or cross ways, extra one-half.
When crotch or cross mouldings are worked before they are
glued on, extra three-quarters.
When sweep mouldings are veneered, the sweep not to exceed
three-quarters of an inch to one foot in length: above three
quarters to inch and half, to be extra one-quarter.
Working any of the above mouldings in rose, king, or zebra wood,
When any of the mouldings is the table are made on the better
of elliptic tableta to be extra one half of the questor similar
Mouldings may be worked in mehomene chemic or each mould
when in maple or och to be outre and fith
The extra time even one half hour is making a mould is an him
The extra time over one-nair nour in making a mould, in making
or menuing a straight, or sweep caul, (including clamps, or other
The management of according to time.
in veneering caps of bases in table, No. 20; when the piece lor
one-third.

### S4 **TABLE**, No. 10.

### Price of Working Mouldings on the Edge of Tops, &c.

When done on hollow work, to be extra one-half on the price of round work. Rounding crotch veneer band, to be extra three-quarters on the rounding. Ditto, thick crotch band, extra one-half.	On straight work.	On round work.	A quarter circle of 19 inches diame- ter or under.	Each break in tops, fc. extra.	Each mitre, or turning a corner, the same.
<ul> <li>Working a faint round on the edge of tops, &amp;c. about 1 deep and 1 wide or under.</li> <li>Ditto, a half round on tops, &amp;c. 5 thick or under, at per foot</li> <li>Faint-rounding inch stuff, per foot</li> <li>Half-rounding inch stuff, at per foot</li> <li>Working a quarter round, or thumb mould- ing on the edge of tops, with one square per foot</li> <li>Working an ogee moulding, on tops, &amp;c. 5 of an inch wide on the face, or under, at per foot</li> <li>Each extra 1 of an inch in width of mould- ings, at per foot</li> <li>Each extra square in mouldings, at per foot</li> <li>Each extra 1 of an inch in ditto, at per f.</li> <li>Working a champher on the edge of tops, &amp;c. 1 of an inch wide or under, at per foot</li> <li>Each extra 1 of an inch in width of ditto, per foot</li> <li>Each extra 1 of an inch in width of ditto, per foot</li> </ul>	$ \begin{array}{c} \text{Cents} \\ 1 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2$	Cents 14 2214 3 7 15 15 125 5 12 13 14 14 14 14 14 14 14 14 14 14 14 14 14	Cents 134 2 21 2 23 12 15 15 15 15 15 7 1	Cents 	
Banding the edge of tops with thick stuff 1/2 inch thick, 1/8 of an inch wide or under, per foot Each extra 3/8 of an inch in width of ditto, per foot Rounding thick band to a feather edge, perft. Ditto, a veneer band to a feather edge, per. ft	4 1 241	6 1 <del>1</del> 3 2	6 2 <sup>1</sup> 2 3 2	3 1 21 11 11	2 142 1
Preparing the edge of tops, &c. for nurling mouldings, fitting and glueing on do. per ft. Preparing the plinth for nurling mouldings, fitting and glueing on ditto, per foot	8 <u>1</u> 6	9 <u>3</u> 9 <u>3</u> 7	4 4 3		2 34 4

The joints in band, or champher, in the above table, not to be charged as extra, when under two inches and a half wide, All mouldings when glued on, to be taken from table, No. 9,

### REFERENCE TO TABLE No. 10.

### MOULDING TOPS,

### Ġс.

Jointing the edge of band on the champher, to the edge of band on the flat of the top, when the edge is straight, at per foot extra, from the table . \$0 3 Ditto, when the edge is on a sweep, per foot extra . 0 6 Each quarter circle of 12 inches diameter, or under, in jointing of AL Each mitre in band, when the edge of band is jointed, extra from the table . Glueing cock-beads on straight work, at per foot Each mitre in cock-beads, extra Rabbeting for cock-beads, at per foot Cock-beads on round work to be two-fifths extra. Ditto, on hollow-work, three-fifths extra. When sweeped both ways, to be double. Making the beads, or other mouldings of hard wood, to be extra one the second and and some and the second second second quarter. When a panel of moulding measures less than two feet, the price to be in the second as two feet. Banding the quarter circles on the top with crotch, the crotch price not to be charged. at e When thick band is made of crotch, to be extra one-half. Banding the edge of tops with veneer band, to be taken from table, No.9. When any moulding in the table is worked to the elliptic tablets on the edge of tops, &c. to be extra, one half of the quarter circle. The most When a champher is to be banded, and measures above two feet in length, the price to be one-fourth less than the table, including mitres-Turning corners always to be considered as mitres. Rounding crotch band to be extra one-half the full price.

### TABLE, No. 11.

Price of Veneering Columns, Stretchers, Legs, Stump Feet, and Jointing Veneers.

The diameter to be measured at the largest end, or largest part. Veneering columns, &c. with crotch, to be extra one-sixth. Rose-wood, zebra, and other coloured wood, to be the same as shaded mahogany.	Straight and equal, three and a half ins. diameter, or under.	Straight and taper- ed, 31 ins diameter, or under.	Tapered with a swell, or diminishid 3 1-2 diameter.	Each half inch more in diame- ter, extra.
Veneering the shaft of an entire co- lumn, a stretcher, leg. or stump	Cents.	Cents.	Cents.	Cents.
foot, 4 inches long or under	18 21	23 26	31	2
Ditto, above 6 inches to 8 inches long	26	31	20	2
Ditto, above 8 inches to 10 inches	32	37	15	- 91
Ditto, above 10 inches to 12 inches	38	43	51	- 91
Ditto, above 12 inches to 15 inches	44	49	57	21
Ditto, above 15 inches to 18 inches	50	55	62	3
Ditto, above 18 inches to 21 inches	• 56	61	68	3
Ditto, above 21 inches to 24 inches	62	67	78	31
Ditto, above 24 inches to 27 inches	68	73	78	31
Ditto, above 27 inches to 30 inches	· 74 ·	79	83	4
Every 3 inches longer, extra	6	6	7	4
Fitting a veneer to a shoulder	6	30	35	12
A butt joint in a column veneer that	10	42	48	1 2
Ditto when prepared by the turner	10	20	24	2
Ditto, when prepared by the turner .			12	- 2
Mak'g a joint in a ven. 6 in. long or und.	- 4	4	41	
Ditto, above 6 inches to 9 in. long	5	6	61	
Ditto, above 9 in. to 12 inches long	6	8	9	
Every 3 inches longer, extra	1 1	1	2	
When the lap joint at the back of a		•		1.1.1
column, &c. 1s made square, extra.	3	4	double.	

When the swell in the diminished column is over one-eighth of

an inch, to be extra a bit is the integration of the second state of the second state

The crotch price to apply to the butt joints. The cost of the

When above eight to twenty legs, &c. are veneered at one time, to be one-sixth less than the full price of the above table.

For glueing up columns, legs, &c. see table No. 3.

When above twenty legs are vensered at a time, to be one-fifth less than the price in the table.

7.

### TABLE, No. 12.

Price of Cutting Out and Fixing Columns, Caps, and Bases, Stretchers, &c.

The stuff in the start is got out of joist, four inches square, or under. Above four to six inches square, each cut extra one cent;	One foot long, or under.	Above 1 foot to 1 foot 6	Above 1 ft. 6 in. to 2 feet	Every 6 inches longer,
above six to nine inches square, two cents.	1.00	inches.		C. Balance
acutilities no united out at	Cents.	Cents.	Cents.	Cents.
Cutting out for turning, a stump foot,	ntorte.	angh	711 8	in al
Planing up a stretcher 4 inches square	្រីឆ្នាំន		19723.57	THE STATE
or under. extra	23	25	27	.0034
Fixing a stump foot, or a leg, with a	ารนี้องไซน	a da Me	e coté s	H dod H.
round tenon prepared by the turner	8	a 10 a	:011 (i	0
Fixing a stretcher with two round	30.5	- 2011	in grading	rigares -
tenons	141a	15	16	0
Fixing the above with square or flat	ntatore			4.57
Eining on ontire column hase and con	L'ant	0	0	
turned on	7	10	19	2
Ditto, a half or three-quarter column			14	Sec.
base and cap, turned on	18	21	23	2
Cutting out, and making a square	S. Sat			1 <u>1</u> 8(2)
column, four inches square, or un-			<b>t</b>	
der, without cap or base	27	30	33	5
Ditto, ditto, an octagon, or hexagon				n ngané.
column, four inches diameter, or un-				
der, without cap or base	43	49	56	5
Lach extra han inch in diameter of		2		1.062m
lumns "	91	1923 TANK	1949-1948 1959 <b>4</b>	
Tapering columns, &c. each side, extra	5	5 <u>1</u>	6	1

Making a separate fillet at top or bottom of a square column, and fixing ditto to its place, one inch thick or under. 80 8 Canting the corners of fillet, each cant . 24 Fixing a cap and base on an entire column of wood or brass . 7 Ditto, ditto, a half or three-quarter column of wood 11 Fixing a brass cap and base on half or three-quarter column . 0 1 Getting out a square piece for a scroll and cap, and fixing ditto after it is carved 0 12 Making and fixing a scroll cap with four scrolls, the whole cap hollowed on three sides, as in plate No. 6, figure 4, veneered on the sides, and round the entire scrolls, each cap n [CONTINUED ON PAGE 88.]]

## TABLE, No. 12.—Continued.

Making ditto of solid mahogany, without veneering, each cap . \$0 75
Making a square straight plinth, or block, on the lower end of a column, or leg, about five inches deep 0 18
Tapering the plinth extra, each side
When the corners of square columns, or legs, are made hollow- ing, &c. or veneering ditto, cove, or other mouldings, see table No. 9, deducting per foot, the moulding not glued on 0 3
For glueing up columns, stretcher, or legs, see table No. 3.
Tapering a stretcher, square, or octagon, &c. each taper, as for a column in the table.
When the octagon of stretcher is from the centre of ditto to the end, the price to be according to the length, as in the table for shaping columns.
For sweeping the stretcher on the edges, &c. see table No. 15.
Working a stretcher, or column of pine, or shaping ditto, to be one-fifth less than the table.

# TABLE, No. 13. Price of Making, Shaping, and Veneering Pillars,

	Sec. Rodings	Sec. Sec.	Q 1415	
Pillars to measure on the largest part for the	Onefeot	Above	Above	Every
size of ditto, and made of pine or similar	long, or	1 fL. long	15 in.	3 inches
wood.	under.	to 15 in.	long, to	longer.
	148313		18 in.	in a la compositione State of the
the second and the fall strategies	Cents.	Cents.	Cents.	Cents.
Making and veneering a square pillar,	સંસ્વોર્ટ હેડીરે	manipp.	1. 1. 1. 1. 1.	「「神経ない」
5 inches square, or under, with hol-	taid, in s		Constraint and	Failager
low at the lower end of ditto ag in		161 2 4		125.5
The No A former 1	170	100	100	
plate 140. 4, ligute 1	119	100	130	
making the pillar octagon, or nexagon	295	300	910	四十十 月
Each extra inch in diameter of the		्युवध		15 dected
above	8	81	19 11	1 6 <b>9</b> 1
Making a pillar 9 inches square, or	់ ទីទី១ ភូមិ	1.282.20		atter
under, shaped ogee, as in plate. No.				t - Carlos
A figure 2 and veneered on the				1.
four sider		016	000	10
	204	210	440	10
Making ogee pllar octagon, or nexagon	.340 .i	1.000	09(4.1)	a d'ant
Each extra inch in diameter of the above	.10	101	11	Q
Making a pillar 14 inches square, or	S111 (372	diach	1.1.3.11	一股间
under, shaped a plain sweep, as in				19415
plate No. 4, figure 3, and veneered			Sec. 1	. diate
on the four sides	216	226	237	12
Making ditto nillar shaped elliptic as	A LO			
dotted line in plate No. 4 forme 2	0777	000	200	10
dotteu mie m plate 140. 4, ngure 3	211	200	<b>.</b>	10
making plain sweep, or emptic ditto,	- 24 AO 4	1.2.2.2.2.4		1
an octagon or hexagon pillar	408	420	433	17
Each extra inch in diameter . S. d. S.	10	- 11	12	0
The first niller in the table to have in the			1. 1	
as a side of distance for the ball	ie start i	a piece	giuea o	<b>n</b> 
each side of ultio, to form the hollow.				1999 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
I ne ogee pular to have three joints in the	start in	glueing	up of di	tto.
The plain sweep pillar, or elliptic ditto,	to hav	e five lo	ng joint	S
and one short ditto in the start.	i statu	tig di site.	• <u> </u>	-
When pillars are made of hard wood, to	be extra	one-six	th of the	a in the second
above prices.	MANNA			- 
For the price of crotch veneer, see table	No 4	1971 (1943) (1993) 	e de la constan	n n Alfrede e
For extra joints in thickening up or		iointa a	an table	
No 9 and 9	square	joints, s	ee lable	S
When the Controlling is the 11 is				· · · · ·
when the first pular in the table is tap	ered to t	he hollo	w, extra	1
each side	5 g - 1 - 5 g		j	. \$0 9
Thickening up pillars with hard wood;	for hard	l wood r	price. se	8
table No. 3.			,,	• •
When any of the above pillars are made	triangu	lar to	he extra	3
on the square nillar one eighth of the	full price		NO CAUL	•
When one of the above nillows are mitter				0 10
when any of the above pillars are milled	i togeth	er, each	mitre	. 0 10
The extra time over one half hour, in ma	king a i	mould, a	caul, o	r
mending ditto, &c. to be paid accordin	ig to tim	ne.		

### TABLE, No. 14.

### Price of Leg Blocks, Shaping Ditto, Moulding and Veneering Ditto.

		1	
When the moulding on the edge, or corner of block, is made elliptic, to be extra one-quarter. Veneering the elliptic extra one-quarter; the mitres in the moulding included. Banding the edge of block, see table, No. 6,	A leg block, or column base, 1 in. thick, or under.	A hollow, or round, on each edge, or corner.	Vencering hollow, or round, or corner.
	Cents.	Cents.	Cents.
A leg or other block, 4 in. square, or under	6	244	51
Each extra inch in length or width of block .	1	01	01
Each extra half inch in thickness of block,	1.20		al art i sa
width of moulding, or in width of veneer, on	10		
moulding	17	1	11
Each canted corner on a block, &c.	2	41	51
Each extra half inch in the thickness of cant .	.01	03	03
Each round corner on a block, moulding or	છે. પ્રદાય	- in which	15 X (11
veneering	3 :::	400.8	·· 14
Each extra half inch in thickness of ditto,		न्द्रोंनु क	्ये श्रेम्स <b></b> र
corner · · · · ·	01/2	1	1 in 1 <u>7</u>
Each sash corner on block .	7	16	24
Each extra half inch in thickness of ditto corner	11	14	2
Each hollow corner on a block	5	12	21
Each extra half inch in thickness of ditto corner	03	11/2	2
Shaping the front edge of block elliptic, ser-		रोगल्य	
pentine, or ogee, without breaks or stops	8	21	28
Ditto, a plain sweep on the edge of block	6	18	24
Each extra half inch in thickness of shaping		Star.	
each edge	14	2	$2\frac{1}{2}$
Each break or stop in the above shaping	2	4	5
Fixing leg block before it is varnished	3	0	0
Making and glueing a thin fillet under a square	block		• \$0 €
Each canted or round corner on fillet		·••••	0 11
Each sash corner on ditto	a quitateae	উচ চেইন	0 4
Each hollow corner on ditto	ndt mi	RIVINI ar Cito Econ	0 3
Shaping the front edge of fillet elliptic, serpentin	e, or og	ee, with	na na na Na mga sa 192

For rounding the edge of block, or rounding the band, see table, No. 10. [CONTINUED ON PAGE 91.]

### TABLE 14.—Continued.

For extra mouldings on block, see table No. 10.

The extra width of moulding is over three-fourths of an inch wide.

Making eight leg blocks, or less, at one time, the price to be as per table above.

Ditto, when above eight to sixteen blocks are made at a time, the price to be one quarter less than the table.

Ditto, when above sixteen blocks are made at a time, to be one-third less each block.

When leg blocks are put together, and veneered for the banding on the edge, the veneer to be taken from the table of veneering, No. 4.

Rounding band, &c. on the edge of blocks, &c. see table, No. 10.

Veneering the round, or hollow corners, on blocks, when worked together, the circle only to be measured for the price of ditto, the flat part as straight.

The width of the moulding in the above table, to start one inch on the face of ditto, or under.

Veneering the hollow, or round, with crotch, to be extra one half the above.

The hollow, hollow corners, with crotch, not extra.

Table 15	. Price of Sha	ping the ${oldsymbol{E}} dg$	e of Blocks for	r Plinth.
[No. 1,	and Sweeping	, the Edge of	Plinth, No. 1	or 2.

The price of all shaping in the table carries the band with it. Band on half, or three quatter round, to be in one piece. Band on round block to be in three pieces of less. All band to be of shaded veneer.	Two inches thick, or under.	Above 2 to 2 inches thick.	Above 91-2 to3in. thick.	Above 3 to 3 1-2 inches thick.	Each alfin. moie in thick
Shaping round the square block under plinth No. 1, 10 inches diameter, or under Each extra inch diameter in shaping block. Canting the corner of a block, or plinth the	Cts. 20 1	Cts. 22 11	Cts. 24 2	$\begin{array}{c} C_{ls} \\ 26 \\ 2\frac{1}{2} \end{array}$	Cts. 3 0
Frotent 4 inches long or under, each cant Every 2 inches extra length of cant Rounding the corner of a block, or plinth Each sash corner formed on block, or plinth	51 1 9 15	6 <del>1</del> 11 10 17	$7\frac{1}{2}$ $1\frac{1}{2}$ $10\frac{1}{2}$ $19$	81/2 2 13 22	1 0 2 3
Each hollow corner on block, or plinth Shaping the front of end piece, a faint or half-round, of about 6 inches diameter, each end	21 26	22 <u>1</u> 27 <u>1</u>	24 29	26 31	s 2
Shaping the front of end piece, three-fourths c. round; of about 6 in. diameter, or under, with one stop or break to ditto Ditto, with two stops or breaks to ditto	6 37 49	8 <del>2</del> 39 51	$7\frac{1}{2}$ 42 54	9 45 57	2 3 3 <sup>1</sup> / <sub>2</sub>
Sweeping the edge of other parts of a plinth, or block, a plain sweep, hollow, or round, each separate sweep 9 inches long on the		ningin 190 Mili 190 Mili			
sweep When above 9 inches to 1 foot long . Ditto, above 1 foot to 1 foot 3 inches long Ditto, above 1 foot 3 inches to 1 foot 6 in.	12 15 18 21	14 17 20 23	16 19 22 25	19 22 25 28	$     \begin{array}{c}       2 \\       2 \\       2 \\       2^{\frac{1}{2}}     \end{array} $
Ditto, above 1 foot 6 inches to 1 foot 9 in Ditto, above 1 foot 9 inches to 2 feet long - Ditto, above 2 feet to 2 feet 4 inches . Ditto, above 2 feet 4 inches to 2 feet 8 in.	24 27 31 35	26 29 33 37	28 31 35 39	31 35 39 43	$2\frac{1}{2}$ $2\frac{1}{2}$ $3\frac{1}{2}$ $3\frac{1}{2}$
Ditto, above 2 feet 8 inches to 3 feet long Ditto, above 3 feet to 3 feet 4 inches long Ditto, above 3 feet 4 inches to 3 feet 8 in. Ditto, above 3 feet 8 in. to 4 feet long	39 43 47 51	41 45 49 53	43 47 51 55	47 51 55 59	3½ 4 4 4
Ditto, above 4 feet to 4 feet 4 inches . Ditto, above 4 feet 4 in. to 4 feet 8 in. long Every 4 inches longer . When two round sweeps meet together, ex	55 59 <b>3</b> 8	57 61 31 10	59 63 4 12	$ \begin{array}{c c} 63 \\ 67 \\ 4\frac{1}{2} \\ 14 \end{array} $	$\begin{array}{c} 4\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 2 \end{array}$
When a round sweep meets at a flat part and worked sharper than a right angle, ex Each break, or square, formed on edge of plinth	8 f 6	10 7	12	14	2 1

When any of the above sweeps, or circles, are made elliptic, ogee, or serpentine, to be extra one-third. For extra joints in band on round blocks, or end shapes, see table, No. 5. When shaping is made in hard wood, to be extra one-quarter.

Table.	No.	16	-Price	of Trusses,	or Co	nsoles;	Veneering	93
ditto.	&c. 1	with th	Price	of a Brack	t, and	Shaping	ditto.	

	0	
A truss is to be six and a half mches wide, or under, on the widest part. Veneering the quarter round, or moulding on	A pair of trusses, 3 1-2 inch	Each extra 1-4th of an inch.
No. 9. The truss to be 20 or 21 inches long.	thick, or under.	in thick- ness.
	Cents.	Cents.
Making a pair of solid, tapered tresses, as in plate,		a a bigan
No. 5, figure 6, to be fitted afterwards to the place		(-2,-2)
designed. (Fixing, see below.)	562	7
Veneering the front of trusses, and lower scrolls of ditto	84	2
Ditto, the back of trusses, and the upper scrolls of ditto	70	2
Veneering both sides of two trusses	70	0
Shaping the top end of trusses, four inches down, or		1 - A - A
less, to a round-cornered case, including the quarter		
round, on the top end, extra .	20	1
Each extra inch above 4 inches from the top end	5	1
Veneering the ditto top end of trusses, without $\frac{1}{2}$ round	55	ī
Ditto, when above 4 inches from the top end, each inch	15	1
Shaping the top end of trusses hollow, to hollow-		
cornered case, including the 1 round on the top end .	40	2
Each extra inch above 4 inches from the top end	8	1
Veneering the ditto top end of trusses without the moulding	67	
Ditto, when above 4 inches from the top end, each inch	16	1
Each extra half inch in width of trusses in working ditto	1	4
Ditto, ditto, in width of the veneering the sides	11	ů č
Making square on top of back scrolls, as dot. line in plate	8	1 . J
Working ditto to a $\frac{1}{2}$ or $\frac{1}{2}$ round, as dotted line in plate	11	$\frac{1}{2}$
Working the front of trusses, to form the point of a leaf,	elsi Generali Alamatan	an a <b>n</b> dan San Ing
When the me made of other ments to be entire	. 24	0
Fixing a pair of trusses between key and other bottoms,	25	0
and a plinth	40	0
Ditto, ditto, when only under the bottom	20	0
Each extra inch in length of trusses	3	1
	a ingeneration and a second	
and 3 inches wide or under, shaped a plain sweep,		
Each attra inch in langth on Jonth of her start	20	2.1
Shaving bracket allintia an datted line in mathe		0
Shaping ditto orea	3	4
Shaning the top of but and of breaket and the time to the	<b>4</b> .2	
Tenering a brocket of oh aide and a and and and and and and and and a	4	
Working a provid on breaket or detted line is it	4	0
the second our bracket, as dotted line in plate.		
· Million of mission for the state of the st		

When a piece for a screw is prepared on the end of trusses, the shoulder to be made by the turner.—When the truss in the start is made straight on the back, deduct one-third-from the start.—When ditto is made of pine, deduct one-eighth from the start.—For jointing, or glucing up stuff, see tables, No. 2 and 3.—For crotch of veneer, see table No. 4.—Veneering or banding brackst, see tables, No. 4 and 6.—The letter A at back of truss, the price not yet fixed. Preparing for a screw to be extra.

### **TABLE**, No. 17.

Price of Lyres, as in Plate, No. 5.

The lyre to be 18 inches long, or under, between shoulder and the top end. Veneers on front may have one joint in ditto, extra joints as per table. A quarter cir- cle is any sweep between two points.	A lyre 1 inch and a quarter thick, or .under.	Each ex- tra eighth of an inch in thickness
Making lyre No. 1 as in plate 9 inches wide or under	Cents.	Cents.
with one or two tenons at the lower end	84	4
When ditto is made as per dotted line, with tenons extra	25	ÎÎ
Veneering the front or back of lyre, each side	18	Ō
Each extra inch in width of lyre	3	0
Making lyre. No. 2, as in plate. 9 inches wide or under.	-	
with one or two tenons at the lower end.	100	4
When ditto is made, as per dotted line, and glued up for		
turning to receive a screw on the end. extra .	25	1
When the scrolls are only worked to the dotted line.		
deduct from start	12	0
Veneering the front or back of lyre, each side	25	0
Each extra inch in width of lyre	3	0
Making lyre. No. 3, as in plate, 10 inches wide or under,	ļ	
with tenons on the lower end .	125	5
Veneering the front, or back of lyre, each side	27	O I
Each extra inch in width of lyre	3	0
Making lyre. No. 4 as in plate, 11 inches wide or under,		
with one or two tenons at the lower end	171	5
When the upper ends are made as per dotted line, and		19 Jan 19
with tenons, extra	25	1 Start
Veneering front or back of lyre, each side	29	0
Each extra inch in width of lyre	3	0
Making lyre, No. 5, as in plate, 11 inches wide or under,	1 - A - A - A	
one or two tenons on the lower end .	215	5
When made with a flat piece at the top end, worked to the		
dotted line, extra	10	1.1
Veneering front or back of lyre, each side .	31	0
Each extra inch in width of lyre	3	0
Each extra quarter circle, in the shaping of the above		
lyres, extra	7	1 1
Each extra square in shaping the above lyres	4	

When the lower part of a lyre is made, as dotted line in No. 1, to be the same as the start. Glueing a piece on front of ditto, or all round, see price of plinth, in the reference to table No. 9; and working moulding on ditto, see table; No. 10.

For the crotch price of Veneering, see table, No. 4.

### **TABLE**, No. 18.

### Price of Pedestals, or Pedal Blocks, and a Reference to Table of Lyres, No. 17.

When a lyre in the start, or an extra, is made of maple, to be extra one-ninth the price of ditto. Making A pedal feet of maple, to be extra one-sixth. When pe-	block, pedes	Each ex-
destal, or pedal block in the start, or the extra is made of soft wood, deduct one-fifth.	nches hick or inder.	in thickness
Making a square solid block for pedal feet, or a pedestal under a lyre. 9 inches long, 4 inches wide or under	Cents. 14	Cents.
Each extra inch in length or width of block, or pedestal	1	1
A fillet half inch thick or less, under a lyre	4	1
A fillet on top or bottom of block, one inch thick or under	10	• 1 × [.
Dovetailing sides and ends together, as a box to form the	- 19 A.	A WELL
pedestal under lyre, or the pedal block, extra	10	0
Making and glueing a top on the box extra, half inch	_	
INCK of under	5	0
Cutting a square note in solid block, for pedal feet .	8	<u> </u>
Making pedal foot, No. 1, as in plate, No. 5, flat and tape the top side	ered on	\$0 12
Veneering the top side when flat	•.**:	0 41
Rounding the top side of foot	•	0 6
Veneering ditto when rounded	•	0 12
Making pedal foot, No.2, as in plate, the top side flat and t	apered	0 21
Veneering the top side flat	•	0 6
Fitting a pedal foot into a lyre, or pedal block -	• •	0 4
Framing a piece on top of a lyre, with single tenons to fix the	ne lyre	
Making and glueing a flat nices on back of the large the lor	• •	0 20
ditto from the lower end of lyre to the bottom of case, as	dotted	e Zoyêver
line in plate, No. 5, fig. 3, to be screwed to a block on the	botton	n <b>0 12</b>
I nickening up the top end of ditto with two pieces for turning	ig and	
Making a broaket to gunnert the flat piece on a low on dist	а. 1. 1. т.	0 16
ned and fixed to luro	o sna-	0.70
Each mortise in a nedestal for a lyre or half inch fillet und	· · ·	0 12
For moulding the edge of fillets or edge of block see to block	No 1	
When moulding is glued on, to be taken from table No. 9	140.1	<b>U.</b>
Veneering hollow, round, or ogee mouldings, see table No.	Q.	
For a plinth round a block, see reference to table. No. 9.		
Veneering and banding blocks, &c. see table, No. 4 and 6.	· · · · ·	1
The pieces designated as fillets, may be flush or project : the	ey are	
to receive mouldings, or band, or they may be plain and so	juare.	· · 1
When mouldings are glued on, and mitred round a block, &	c. see	
table, No. 9.	l stre i	
and a first sector of the s		

### TABLE, No. 19.

### Price of Pilasters, and Shaping ditto, &c.

One foot long or under.	Above onu foot to two feet.	Above two to three feet long.	Every 6 inche longer
Cents. 11	Cents. 17	Cents. 25	Cents 4
14	20	28	<b>4</b>
17	24	32	5
, : 2	. 2 <u>1</u>	3	1
- 6	10	14	**2 <del>3</del>
12	16	20	5‡
3	8	,	0
5	5	5	0
	One foot long or under.	One foot long or under.Above onu foot to two fcet.Cents. 11Cents. 1714201724221/261012163355	One foot long or under.Above ono foot to two feet.Above two to three feet long.Cents. 11Cents. 17Cents. 251420281724322 $2\frac{1}{2}$ 361014121620333555

### TABLE, No. 20.

### Price of Caps and Bases, for Pilasters and Columns.

When caps and bases are made of rose, or similar hard wood, to be extra one-third. When made of crotch, to be extra one-half. For veneering caps or bases, see table, No. 9 or 6.	For pilas- ters on front and edges.	For columns on three sides.	Each extra side on columns.
Making and fixing cap, No. 2, as in plate, No. 6, a quarter round at the top end, a square	Cents.	Cents.	Cents.
a fillet at the lower end of ditto	26 3	30 3	15 1 <del>1</del>
Working the shart, or induce part, a plain of elliptic sweep . Working ditto an ogee, as in dotted line .	4 12	4 <u>1</u> 13	2 <del>1</del> 61 61
straight to the fillet at the lower end of cap. Each $\frac{1}{2}$ round, or bead, under the top moulding Each hollow under do. or the square as dotted line	8 5 3	9 5 <u>1</u> 3	4 <u>1</u> 2 <u>4</u> 11
Working the upper mould'g an ogee as dotted line Each half round, or astragal, at lower end of cap Working the shaft, or middle part an ogee, with-	4	$\frac{41}{7}$ 7	2 <del>1</del> 3 <del>1</del>
out a point or fillet at the top, or lower end of do. Each extra fillet or square in the cap Making and fixing cap, No. 1, as in plate, No. 6,	8 2	8 2	4
taper as dotted line Working ditto cap an ogee as per dotted line Each extra half inch in depth or height of the	25 29	28 32	14 16
Making and fixing base, No. 1, as in plate, No. 6, with a half-round and a square, an order		24	
without a square, or an elliptic hollow with a square Making and fixing base. No. 2, as in plate. No. 6	14	17	8.07
Each hollow, more or less Each square, or fillet, more or less, add or deduct Each extra quarter of an inch in height of base	3	3 <u>1</u> 2	1 <u>3</u> 1
above one inch and one-eighth in ditto . Each $\frac{1}{4}$ of an inch in thickness of cap or base The above caps and bases to be mitted up, or	1 1 the sha	1 1 ne turne	$\frac{1}{2}$
edge or side. When any part of cap or base is veneered, see banding, No. 6, &c.	table, N	io. 9, oi	table of
The thickness of caps and bases are for pilaster of $3\frac{1}{2}$ square. A cap or base is to be considered made of plain	of <del>§</del> thic straight	k. Ditto wood.	column
When ditto is made of crotch, or of cross wood, t Thickening stuff for caps or bases, see table, N	o be extr o. 3, for	a one-th price of	ird. ditto .

### TABLE, No. 21.

98

## Price of Grooved and Dutch Clamping, &c.

	1	-			
Mortise elamping on straight work, to be extra two-thirds. Ditto, ditto, sweep work, to be extra three- quarters. Ditto, ditto, elliptic, or other quirk sweeps, to be extra double.	Nine inches long or under.	Above 9 inches to 1 foot 3 inches.	Above 1 foot 3 to 1 foot 9 inches.	Above 1 foot 9 to 2 feet 3 inches.	Above 2 feet 3 to 2 feet 9 inches.
	Cents	Cents.	Cents.	Cents.	Cents
<ul> <li>Each grooved clamp 5 of an inch thick, 11 inch wide or under, of pine, or whitewood.</li> <li>Each extra 1 inch in thickness, or 1 inch in width</li> <li>Each grooved clamp, 5 of an inch thick, 11 inch wide or under, of cherry, or mahogany</li> <li>Each extra 1 inch in thickness, or 1 inch in width</li> <li>Double grooving a clamp, extra</li> </ul>	5 1 <del>1</del> 10 2 4	7 2 13 2 5	9 $2\frac{1}{2}$ 16 2 6	11 3 20 $2\frac{1}{2}$ $6\frac{1}{2}$	$14$ $4$ $24$ $2\frac{1}{2}$ $8$ $14$
Each mitre in a grooved clamp	14	14	14	14	14
<ul> <li>Each Dutch clamp, § of an inch thick, 1 inch wide or under, of cherry, or mahogany</li> <li>Each extra ½ inch in thickness, or 1 inch in width</li> <li>Each mitre when the end wood is cut away.</li> <li>Each Dutch clamp, § of an inch thick, 1¼ inch wide or under, of pine, or whitewood</li> <li>Each extra ½ inch in thickness, or 1 inch in width</li> </ul>	7 1 10 5 1 <del>1</del>	8 1 10 6 1 <sup>1</sup> / <sub>4</sub>	9 1 $\frac{1}{2}$ 10 7 1 $\frac{1}{2}$	10 1 <sup>1</sup> / <sub>2</sub> 10 8 1 <sup>1</sup> / <sub>2</sub>	2 10 2 3 2 2 2 2 3
Groove clamping sweep work, to be extra one Ditto, ditto, elliptic, or other quirk sweeps, to Dutch clamping sweep work, to be extra one Ditto, ditto, elliptic, or other quirk sweeps, ex The end wood is always to be sized for the D The Dutch clamp may be put on flat, or edg	e-half. o be e e-quar tra or Dutch eway	xtra t ter. ne-hal clamp s.	hree- f.	quart	ers.

				Toma in Tanta	trail in the	
		NIT	1		ا میں دی دی۔ اجبعہ آبور دوجیوڑیوں	
			▲ 🏊 🕘 🖉		•	
·	이 문화 올랐다.					
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Articles that al	e to be iurnishe	ea for the	Finisher		•	72
Bottoms		. The second	<b>i (</b> 1948) i 1844			3
Backs .		••	•		10 <u>1</u> 10 <b>1</b>	4
Braces and Bel	ly Brackets	•	•	•		6
Blocks in the (	Jase 📜				2013년 1월 1889 <del>-</del>	6
Blocks under th	ne Case for Dra	wers, Pi	llars. &c.			13
Back of Cabine	t Case	化合金胶剂	er er stade			28
Brace of Cabin	et Case		1.000		• • • • • • • • • • • • • • • • • • •	20
Back of Piccol	Case .		•	•		23 11
Braces in Dices		•	•	•	No destriction en tropica. La childre di service	44
Draces in front	f Universital C	•	•			44
Diace in none (	n nonzontal O	ase				49
Block Levers	•	•			•	59
Back Catches		•	•			62
Cylinder Fall i	n Cabinet Case	•.	•	•	•	35
Cabinet Case		•	•			27
Cornice, &c. in	Cabinet Case	· · · Space	•			<b>3</b> 6
Cabinet Action			•			63
Drawers						15
Damper Buttor	15	a second				50
Damper Heads				and the second sec	••	60
English Action		•	•	n an tha an t	na S <b>a</b> tan na €	50
Flar Finishing		i ●• Entress i i i i i i i i i i i i i i i i i i i	्∎्रिटीम् •		an a	50
Fig Finishing	in an Daily See	in Cali	i de la compañía de	이 전 가 나는 것		21
<b>F</b> raining Munit	ings, nans, œc.	in Cabi	iet .	•	• • • • • •	31
Fly Finishing	Cabinet Case					38
Framing Munt	ings, Rails, &c.	in Picco	olo .	ा भिरतिहोः ।		41
Flat Dampers	•	•		. <b>.</b>	ighter <b>a</b> the se	60
French Action	: .	•	•	াই কাইি	indente 🖅 in	<b>60</b>
<b>Finishing</b> , or p	utting in Action	1, No. 1		di di segera	್ಟೇಶ್ಮೇಗಳು	67
Finishing, or p	utting in Action	, No. 2				69
Finishing, or p	utting in Action	. No. 3				70
Horizontal Cas	e					1
Horizontal Ger	man Grand Ac	tion Case	· · · · ·		•	
Hammer Butts		non ous	•		· •	20
Hinge Butte in	Franch Action	•	•	•	•	57
Uammar Dutts III	in Evenel Action	Le Si	•	•	•	00
nammer Butts	in French Acti	on	•	•	•	61
Hammer Head	s and Shanks in	n French	Action .	•	•	61
Horizontal Dar	nper Action	•				62
Harp, or Buff S	Stop .	•			1	71
Jacks on Hopp	ers .			•	• 1	58
Jacks in Franci	h Action					0 1

iñdex.	ii
Key Bottoms in Cabinet Case	. 34
Keys	64
Keys, Cabinet or Piccolo	. 66
Levers for Mouth-piece Keys	. 59
Name Boards, No. 1	. 8
Name Boards. No. 2	. 10
Name Boards, No. 3	. 11
Name Boards, No. 4	. 11
Name Boards in Cabinet Case .	33
Name Boards, &c. of Piccolo 11, out so haddent ind more an	42
Other Work received by the Case Maker, to be deducted	26
Ogee Fall. No. 1 in Cabinet	
Ogee Fall, No. 2	35
Ogee Fall of Piccolo	43
Plinth. No. 1 .	16
Plinth. No. 2	18
Pediment. &c. in Cabinet Case	37
Plinth in Cabinet Case	38
Piccolo, or Cottage Cabinet	. 39
Rest-pin and Hitch-pin Block in Cabinet Case Abarrate in the	30
Rest-pin and Hitch-pin Block in Piccolo	45
Shaping Corners of Case	1 . 11
Scroll Feet	10
Sounding Boards	46
Short Sounding Board	51
Sounding Board, long, getting out	52
Sounding Board, short, getting out	52
Sounding Board in an Upright Case	1 100 53
Sounding Board, jointing, for Cabinet	53
Sounding Board, Jointing, for Piccolo	53
Tablets on Case. Shaping ditto. &c.	12
Tops. extra	16
Top Damper Levers for Springs	63
Upper Hammers, No. 1	56
Upper Hammers, No. 2	56
Upper Hammers, No. 3	57
Work received by the Case Maker of Cabinets, to be deducted	38
Work received by the Case Maker of Piccolos, to be deducted	43

# INDEX TO TABLES.

	Dene
No. 1. Putting on Brass Work .	73
No. 2. Flat and Grooved Joints .	74
No. 3. Glueing or thickening up Stuff .	75
No. 4. Of Veneering	76
No. 5. Joints in Veneers	77
No. 6. Of Banding	78
Reference to the Table of Banding	79
No. 7. Of Fillets	80
No. 8. Of Stringing	81
No. 9. Working and Glueing on Mouldings, and Veneering ditto	82
Reference to Table No. 9	83
No.10. Working Mouldings on the Edge of Tops	84
Reference to Table, No. 10.	85
No. 11. Veneering Columns, Stretchers, Legs, Stump Feet, and	
Jointing Veneers	- <b>86</b>
No. 12. Cutting out and fixing Columns, Caps, Bases, and	
Stretchers	87
Table, No. 12. continued	88
No. 13. Making, Shaping, and Veneering Pillars	89
No. 14. Leg Blocks; Shaping Moulding, and Veneering ditto .	90
Table, No. 14, continued	91
No. 15. Shaping Edge of Blocks for Plinth, No. 1, and Sweep-	
ing the Edge of Plinth, No. 1 or 2.	92
No. 16. Trusses, or Consoles, Bracket and Shaping ditto	93
No. 17. Lyres	94
No. 18. Pedestals, or Pedal Blocks, and a Reference to Lyres	93
No. 19. Pilasters, and Shaping ditto.	90
No. 20. Price of Caps and Bases, for Pilasters and Columns	. 97
No. 21. Price of Grooved and Dutch Clamping, &c.	. 80

### ERRATA.

- Page 1, line 10, for end, read ends.
  - 1, 19, for metre, read mitre.
    - 4, 6, for metre, read mitre.
  - 5, after line 25, insert, veneering the back with crotch, to be counted three times the price in the table.
  - 5, after line 27, insert, joints in crotch veneer to be paid as crotch, in table of joints.
  - 7, line 21, for length, read width.
  - 8, ---- 13, for 50 cents, read 55 cents, 11, -- 21, for or, read as.

. 1

- 11, -21, for or, read as. 15, -29, after straight, read extra. 19, -18, for tap, read top. 21, -4, for the, read one. 36, -16, for 40 cents, read 4 cents. 36, -35, for an, read arch. 42, leave the 20th line out.

- 43, line 18, for straning, read stringing

- - 68, --- 34, after champhered, leave out the rest of the line.
  - 71, last line, for \$5 6 cents, read 6 cents.
  - Table, No. 1, line 5, for square, read plain.
    No. 4, --- 18, for of, read off.
    No. 5, --- 17, for 3 in. read 9 inches.
    No. 6, --- 1, for bending read banding.
    No. 7, --- 5, after in, read round.
    No. 12, --- 34, for 1 cent. read 19

    - cents. ь,
    - No. 16, -5, for tresses, read trusses. No. 18, 2d col. after half, read inch.

The pin through tack into long block, to

48, ----23, for 78 cents, read 18 cents. 49, ---10, after maple, read extra. 49, ---19, for 12 cents, read 62 cents. 5 be four inches long or under. Each extra inch in length of pin - \$0 1 Ditto, when thorough fard wood - 0 1

I'r The paper being sized, the foregoing corrections may be easily made with a pen.

Plate No 1



S. Ackerman.

Plate No 2



S. Ackerman.

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Plate No 3









S.Ackerman.

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No. 17.

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