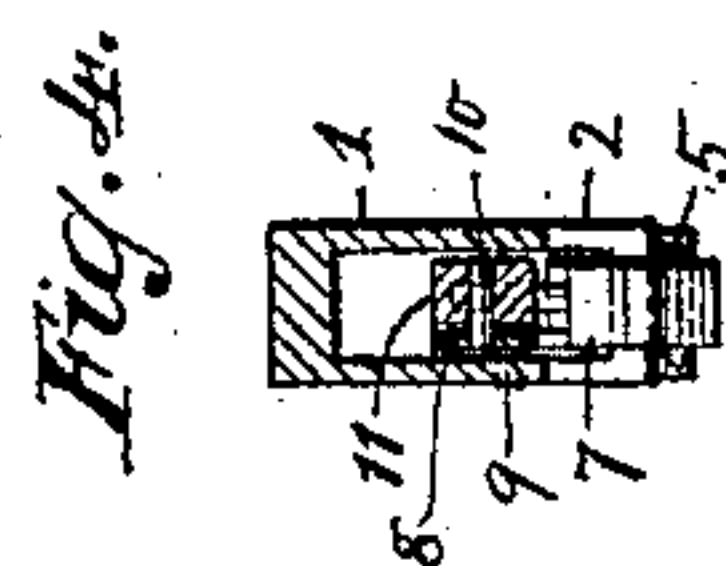
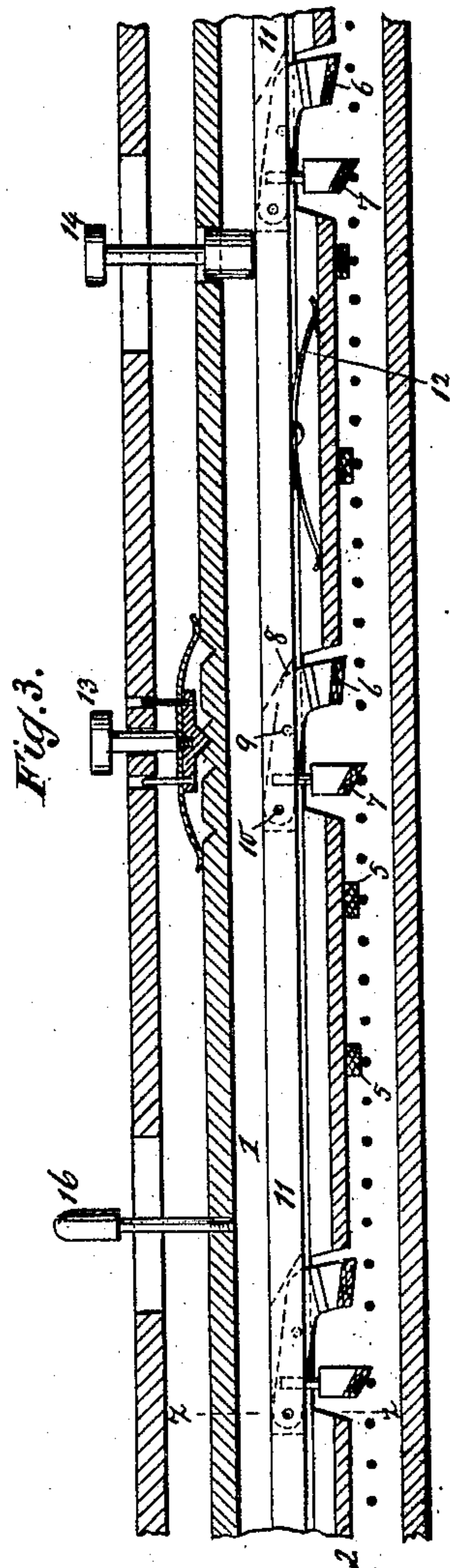
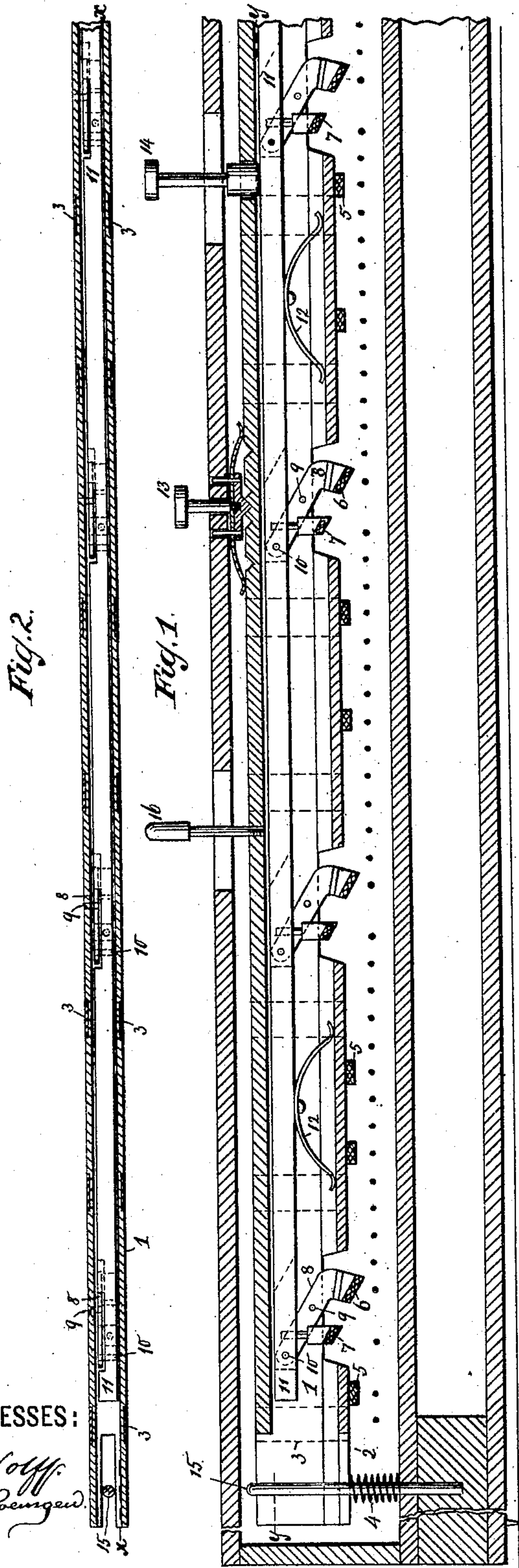


(No Model.)

R. DOLGE.
HARP.

No. 574,308.

Patented Dec. 29, 1896.



WITNESSES:
E. Wolff.
(Chas. E. Poemgen.)

INVENTOR:
Rudolf Dolge.
BY
Hauff & Hauff
ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUDOLF DOLGE, OF NEW YORK, N. Y., ASSIGNOR TO THE C. F. ZIMMERMANN COMPANY, OF DOLGEVILLE, NEW YORK.

HARP.

SPECIFICATION forming part of Letters Patent No. 574,308, dated December 29, 1896.

Application filed September 21, 1895. Serial No. 563,194. (No model.)

To all whom it may concern:

Be it known that I, RUDOLF DOLGE, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Harps, of which the following is a specification.

The object of this invention is to obtain a bar or manual for stringed musical instruments, such as harps, citherns or the like, which bar or manual can be readily or easily operated; and the invention resides in the novel features of construction set forth in the following specification and claims, and illustrated in the annexed drawings, in which—

Figure 1 is an elevation of a bar or manual sectioned along $x x$, Fig. 2. Fig. 2 is a section along $y y$, Fig. 1. Fig. 3 is a view like Fig. 1 with parts in a different position than in Fig. 1. Fig. 4 is a section along $z z$, Fig. 3.

In improved kinds of instruments the bars or manuals are arranged not only with fixed dampers or contactors, but also with one or more movable dampers or contactors, so that changes can be produced, as, for example, from major to minor. To simplify and facilitate the work of the player, it is important that the actuation of the movable dampers or contactors should be effected by the same kind of movement that is used to actuate the bar.

In the accompanying drawings is shown a bar 1, which is hollow or gutter-shaped, having its lower or open edge closed by a piece 2, secured in place by fastenings, such as light strips or bands 3. The bar is normally held out of contacting position by springs 4, but when depressed against the action of said springs the dampers or contactors 5 and 6 make contact. The dampers or contactors 5 are fixed to the bar, while the dampers or contactors 6, as also dampers or contactors 7, are movable.

The dampers or contactors 6 are each carried by an arm of levers 8, fulcrumed at 9 to the side of bar 1, said levers 8 being housed in the bar. Said levers are pivoted or jointed at 10 to a link 11, normally held raised in the bar 1 by a spring or springs 12.

When the bar 1 is actuated by depressing or actuating handle 13, the dampers or contactors 5 and 6 are brought to active position, but if such a depressed or actuated bar 1 has the

change-handle 14 depressed or actuated, Fig. 3, the link 11 is actuated to bring into action dampers or contactors 7, which before were idle, while the dampers or contactors 6 are now idle.

The changes that can be effected by suitable disposition of fixed and movable dampers or contactors are obvious.

The depressing or actuating handle 13 and change-handle 14 are both actuated by like movement, so that the player does not have to make a variety of movements for effecting the actuation of the bar 1 and the change of tones which are dampened or brought to sounding condition.

The bar 1 is shown shiftable, its ends being slotted to straddle the guides or pins 15, the shifting being effected by shifting handle 16. The depressing or actuating handle 13, if not shiftable, can be kept centrally located between the guides 15, but this feature of depressing or actuating handle 13 forms no feature of this invention.

The change-handle 14 of course shifts with bar 1 and is shown extending through a suitable opening in the top of said bar 1.

The contacting faces of the dampers or contactors 6 and 7 are shown somewhat inclined, whereby these individual or movable dampers or contactors can be better adapted for clean-cut contact with and release of the strings.

As lightness and simplicity of construction are desirable it may generally be preferable to have a group of dampers or contactors, such as 6 and 7, linked together to alternate, as seen, and actuated by a common change-handle.

Of course it is obvious that chords can be produced not only by having the bars provided with dampers for cutting out certain strings, but also by bars, which by contacting with certain strings will cause said strings to sound, while leaving others dead or unsounded, the contacting being readily effected by hammers, picks, or the like on the bar.

In the drawings I have illustrated the action of a damper or dampers 5 without indicating the grouping of the dampers for producing a certain chord, as this will be readily understood without special illustration.

What I claim as new, and desire to secure by Letters Patent, is—

1. A depressible bar or manual combined

with individual dampers or contactors (one or more), a depressible link for actuating the individual damper or contactor, and a depressible key or keys for actuating the said link, substantially as described.

2. A hollow or chambered bar or manual provided with a link housed and made depressible in said bar or manual, combined with springs housed in said bar or manual and made to directly support the link, an actuating-key for said link, and dampers or contactors (one or more) actuated by said link, substantially as described.

3. A hollow or chambered bar or manual provided with a depressible link adapted to abut against or be arrested by the top of the bar or manual, combined with springs housed in the lower part of the bar or manual and made to directly support the link for normally holding the latter against the top of the bar, a handle for actuating the link, and dampers or contactors (one or more) actuated by said link, substantially as described.

4. A bar or manual, combined with a group of individually-movable alternating dampers

or contactors, and a link common to the alternating dampers or contactors of the group, substantially as described.

5. A bar or manual provided with a link housed in the bar, dampers or contactors carried by the link, damping or contacting levers fulcrumed to the bar and actuated by the link, and an actuating-handle for the link substantially as described.

6. A bar or manual made depressible or movable toward and from the strings of a musical instrument and provided with a damper or contactor provided with an inclined contacting face and made depressible or movable toward and from the strings in the direction corresponding to the direction of motion of the bar or manual, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

RUDOLF DOLGE.

Witnesses:

WM. C. HAUFF,
E. F. KASTENHUBER.