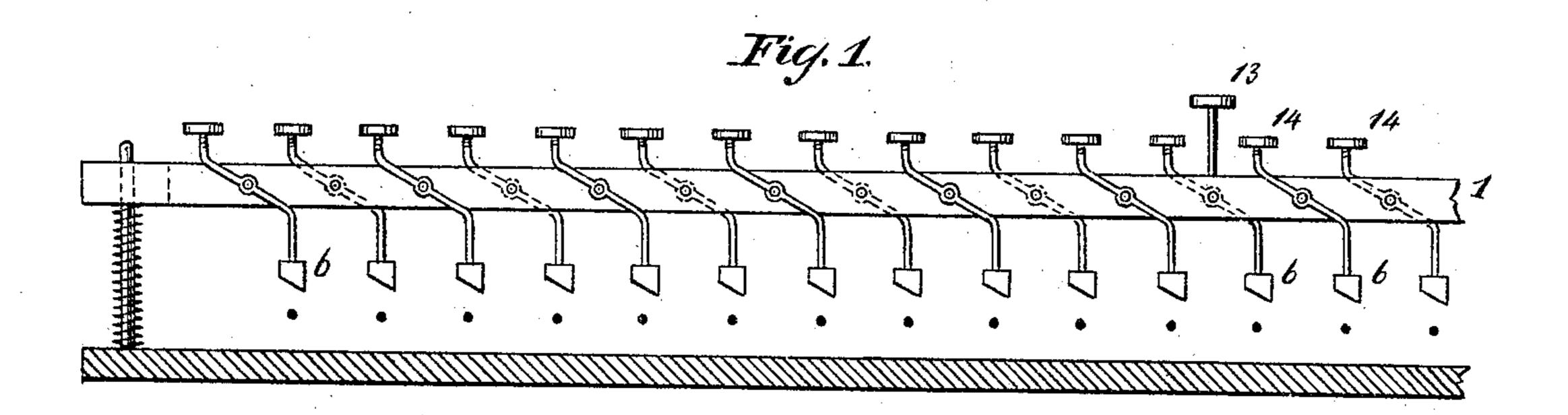
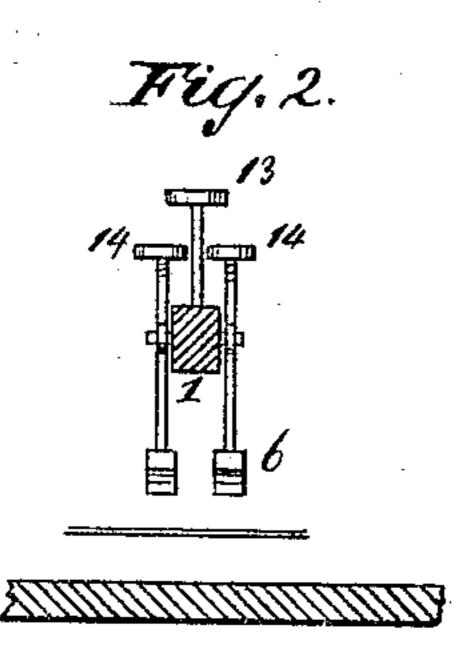
(No Model.)

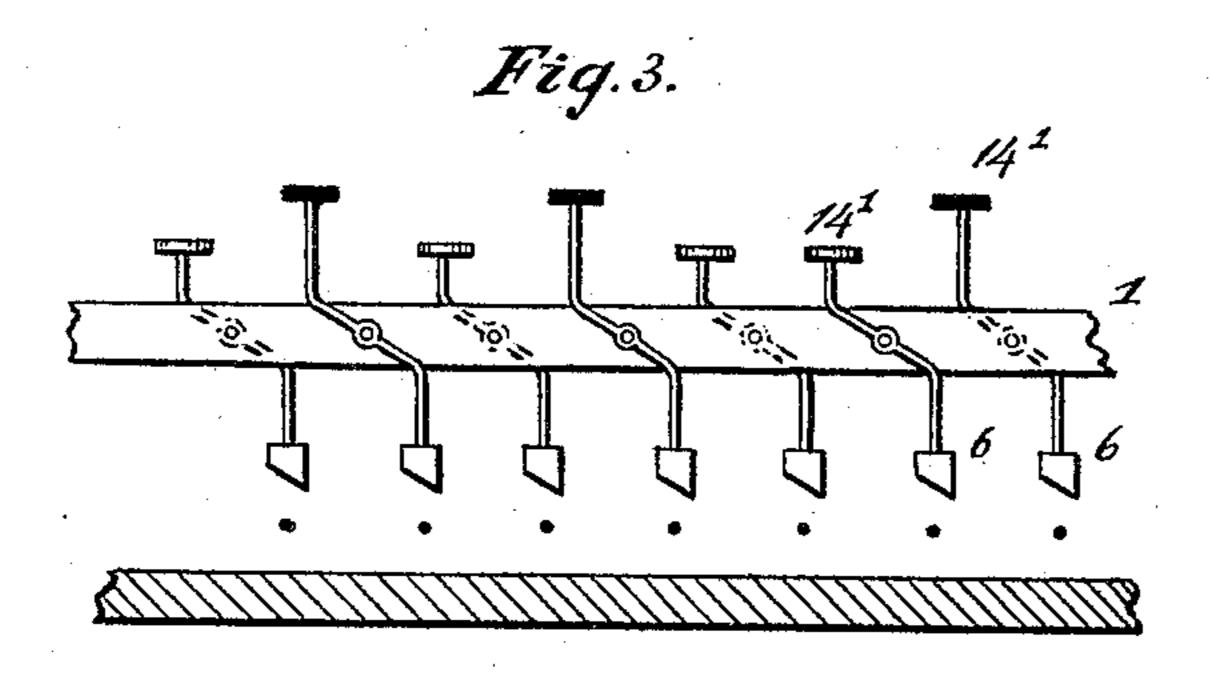
R. DOLGE.
HARP.

No. 575,638.

Patented Jan. 19, 1897.







WITNESSES:

E. Wolf. Chao. E. Toeurgew. INVENTOR

Rudolf Dolge.

BY Sauf Many

## 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. 575,638, dated January 19, 1897.

Application filed May 5, 1896. Serial No. 590,347. (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, eitherns, or the like, which bar or manual enables a considerable variety of effects to be produced in regard to the formation or variation of chords or the execution of movements; 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 a side elevation of a bar or man-20 ual. Fig. 2 is a transverse sectional view of Fig. 1. Fig. 3 shows a modification.

The bar or manual 1 carries dampers or contactors 6. Each damper or contactor 6 is movable by itself independently of all the 25 others. A handle or finger-piece 14 is provided for each damper or contactor. By this arrangement variations or changes in chords or intervals can be produced, such, for example, as from major to minor, diminished and 30 augmented, or oblique motion can be executed, as desired. Supposing a bar or manual having such dampers to be moved by its handle 13 or by any suitable pedal or appliance to bring the dampers into action, the dampers 35 being arranged chromatically or at half-tone or semitone intervals, all the strings or notes will be dampened or muted. Then actuating a handle 14 to free a damper, for example, that of C, this note or string will be free to 40 sound; also, by freeing the tenth damper from the C-damper the note A or the major interval C A will be freed. Then by leaving said tenth damper to return into action or damping position and freeing an adjoining damper, as the ninth or eleventh damper, the interval will become minor or augmented, as, for example, CA flat or CA sharp, or by holding said ninth or A-flat damper out of action and leaving said first or C-damper return into 50 action or damping position while freeing the

adjoining or second or C-sharp damper the interval is diminished to C-sharp A-flat.

By successively freeing, for example, the first and fifth, the first and sixth, the first and seventh dampers, and so on, oblique 55 movement, as, for example, the sounding of intervals or notes C E, C F, C F sharp, and so on, is effected.

By locating the individually-movable dampers or contactors 6 alternately on opposite 60 sides of bar or manual 1 the dampers or contactors can be compactly placed without interfering with one another.

Instead of having the dampers 6 such dampers might be replaced by picks or sounders 65 for causing a string or note to speak instead of muting the note.

The dampers or contactors 6 upon the freeing of handles or keys 14 can be allowed to return by their weight or by returning-springs 70 (not shown) applied in any suitable way.

Of course the device is not limited to the exact construction shown, as modifications can be made which are within the scope of the invention. For example, the manual, 75 bar, or support 1 instead of having the keys or handles 14 on a level, as indicated in Fig. 1, can have the keys on different levels and colored, as shown, for example, in Fig. 3, where the low keys or handles 14' by being 80 white and the high keys or buttons 14' by being black, as in a piano, the playing of the instrument or the selection of the notes to be freed can be readily effected by one familiar with a piano-keyboard.

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

1. A support bar or manual made movable toward and from the strings of an instrument, and provided with dampers or contactors 90 each movable independently of all the others and each provided with an individual handle substantially as described.

2. A support bar or manual provided with dampers or contactors each movable inde- 95 pendently of all the others and alternately arranged on opposite sides of the bar or manual substantially as described.

3. A support bar or manual provided with dampers or contactors having their handles 100

on different levels and each movable independently of all the others substantially as described.

4. A support bar or manual provided with dampers or contactors having their handles on different levels and variously colored and each movable independently of all the others substantially as described.

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In testimony whereof I have hereunto set my hand in the presence of two subscribing 10 witnesses.

RUDOLF DOLGE.

. Witnesses:

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