(No Model.)

J. H. LANE.

REED ORGAN.

No. 479,565. Patented July 26, 1892.

Fig. 1.

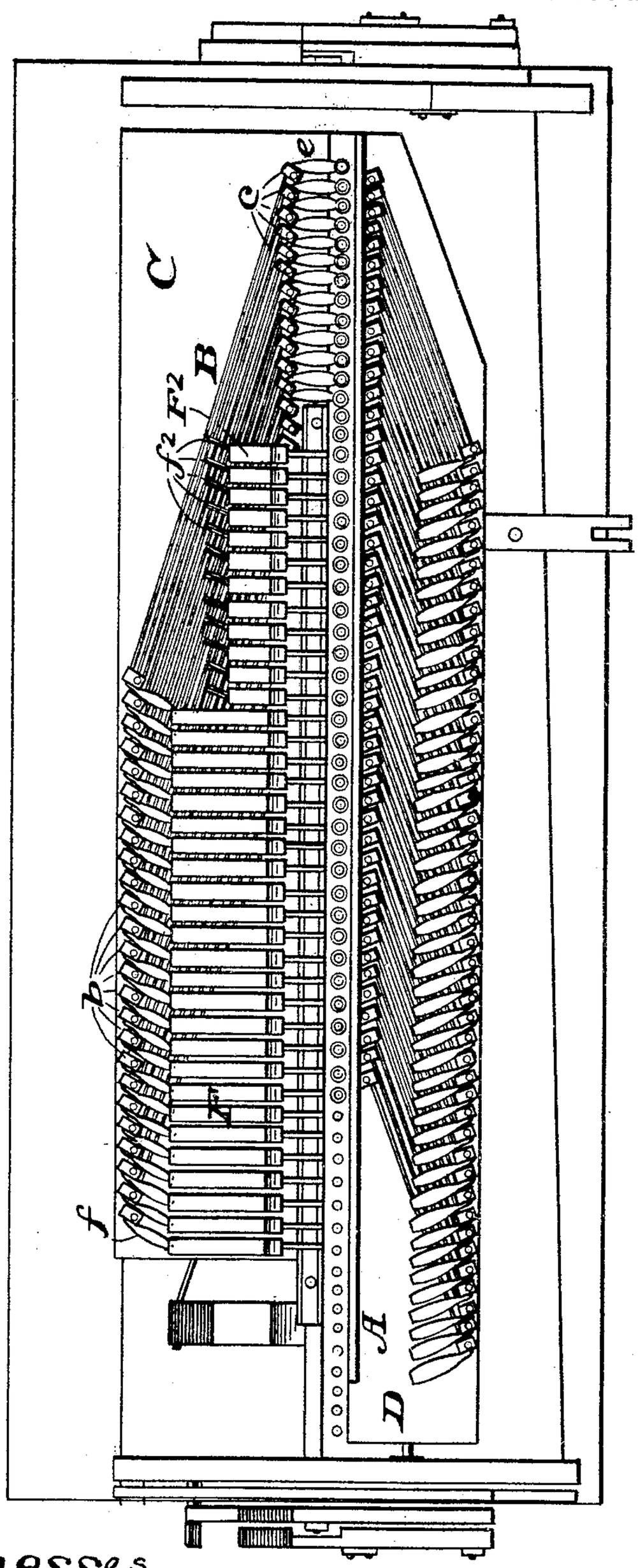


Fig. 3.

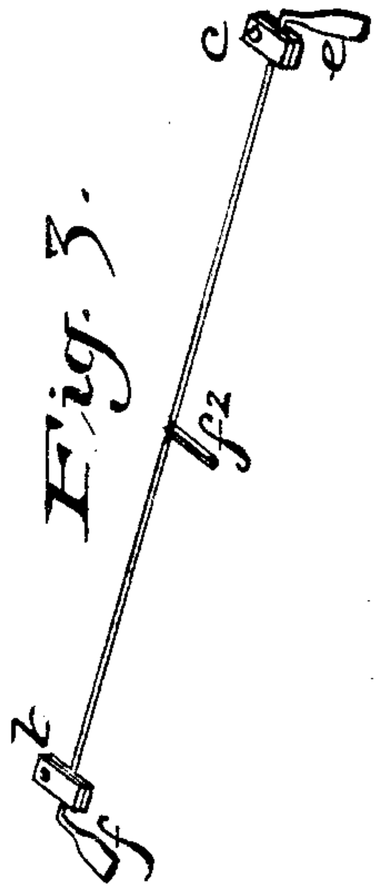
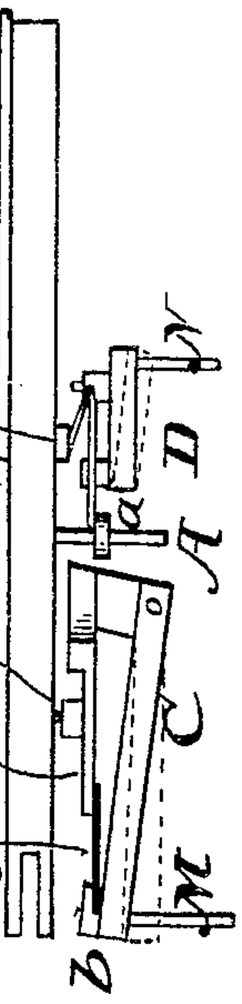


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN H. LANE, OF CLEVELAND, OHIO, ASSIGNOR TO FRANKLIN L. RAYMOND, OF SAME PLACE.

REED-ORGAN.

SPECIFICATION forming part of Letters Patent No. 479,565, dated July 26, 1892.

Application filed November 17, 1891. Serial No. 412,218. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. LANE, a citizen of the United States, and a resident of Cleveland, county of Cuyahoga, and State of Ohio, have invented certain new and useful Improvements in Reed-Organs, of which the following is a specification.

This invention relates to organ-couplers; and it consists in additional improvements on Patent No. 329,796, dated November 3, 1885, to Orison C. Whitney for an organ-coupler. In the above-mentioned patent the double coupler is dependent on the single coupler for its action.

The purpose of this improvement is to carry out and perfect the double coupler to the full extent of the reed-board and render the same independently operative. To this end I construct the right-hand twelve rollers B with middle arms f^2 and add twelve half-levers F^2, which actuate the said arms f^2, and thereby provide the means for extending the double-octave movement to the end of reed-board.

This improvement is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a double-octave attachment having my improvement embodied. Fig. 2 is a side elevation of a key and a portion of the mechanism for operating the said octave-coupler. Fig. 3 is a detached view of one of the double-octave rollers.

The following is a description of the mechanism comprising the hereinbefore-mentioned patent, incorporated in this specification to show the old in conjunction to my improvement.

A represents the valve-stems, operated in the usual manner by depressing the keys. These valve-stems are provided with collars *a*. In front of the valve-stems is the single-octave attachment. In rear of the valve-stems is located the double-octave attachment. The rollers B are journaled in suitable boxes *b* and *c*, attached to the table C, and have arms *e* on the right hand, that engage the collars *a*, and on the left hand arms *f*, that extend under the ends of the levers F and are actuated thereby. These levers are pivoted at G, as shown in Fig. 2. The keys H, one of which is shown in Fig. 2, are provided with the pins I and J, the former operating the arms K of the single-octave attachment and the latter operating the levers F, that in turn actuate the arms *f* of the rollers B. The pins J, engaging the levers F, are in such position relative to the fulcrum that an equal motion is given to the arm *f* of the double-octave attachment and the arms K of the single-octave attachment. The tables C and D, to which the respective attachments are secured, are hinged on the respective sides nearest to the valve-stems, and when raised by the action of the pedals, stops, or knee-lever, to which they are respectively attached—for instance, by the connecting-rods M and N—to the position shown in Fig. 2 the levers F and the arms K are actuated by the keys; but when in their normal position (shown in dotted lines in Fig. 2) these parts do not come in contact with the keys. Either or both the tables may be raised as desired. As the rollers B are of the required length to span two octaves, the right-hand roller, whose arm *e* engages the right-hand or upper valve of the instrument, will be actuated by a key two octaves farther down the keyboard, and consequently for the key above there will be no corresponding rollers.

Here ends the description of said Patent No. 329,796. A resort is thenceforth made to the single-octave attachment. To avoid such means for a continuation of the results, I have devised a means for continuing the double tones in manner as follows: To the twelve right-hand rollers B, I have added a middle arm f^2, and have also twelve half-length levers F^2. Now by continuous playing on the keyboard the last twelve rollers are used for purpose of producing the double tones the same as those below the said twelve rollers are made to serve the double purpose, for as the arms *f* and f^2 being beneath their respective levers F F^2 the depression of either the half-length levers or the full-length levers actuates the rollers singly and independently of each other. This

makes a very simple and easy method of continuing the double tones to the extreme right of the keyboard and dispenses with the single-octave attachment.

Having described my invention, I claim—

In a reed-organ or other instrument, the combination, with a double-octave attachment, of the half-levers F and rollers B, provided with the middle arm f^2, substantially as and for the purpose set forth.

JOHN H. LANE.

Witnesses:
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