(No Model.)

2 Sheets—Sheet 1.

W. MURPHY.

OCTAVE COUPLER FOR ORGANS.

No. 322,121. Patented July 14, 1885.

Fig. 1.

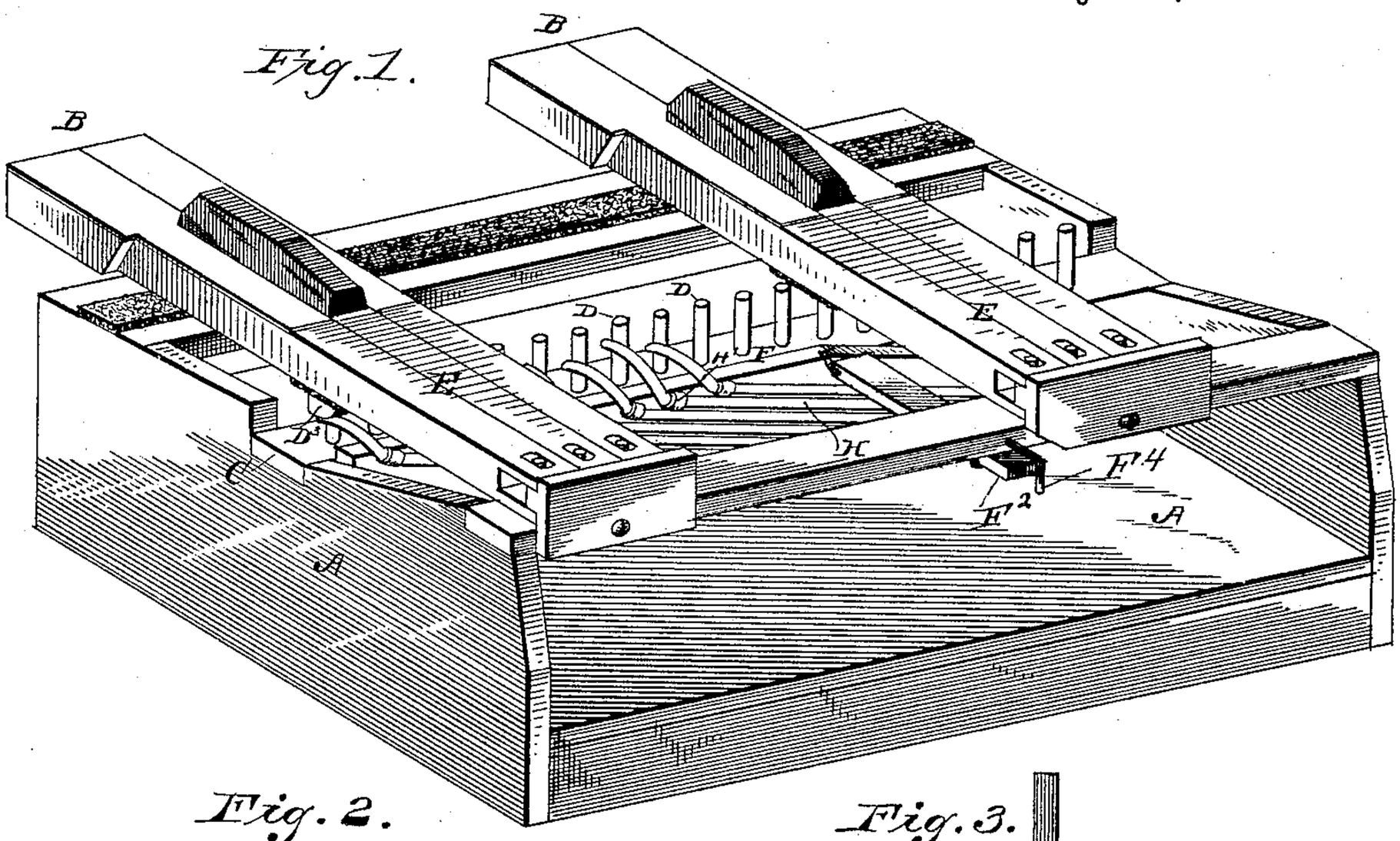


Fig. 2.

Fig. 3.

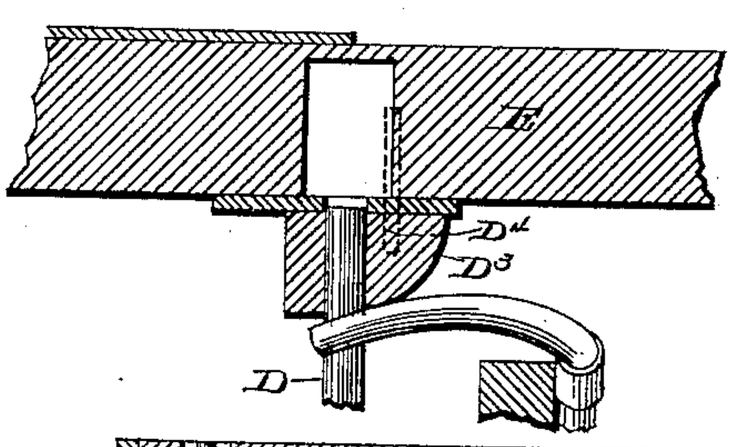
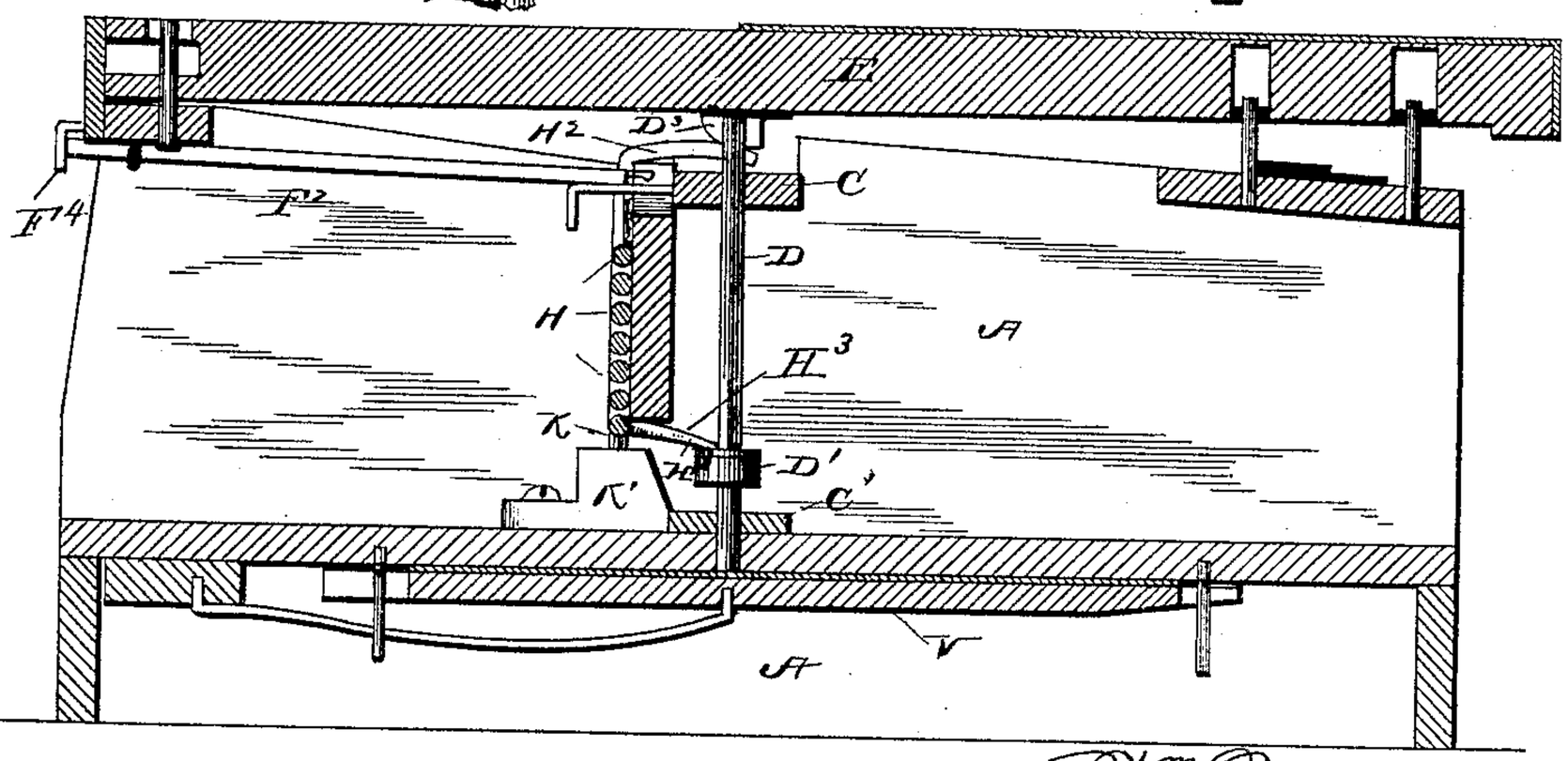


Fig. 4.



WITNESSES

W. M. Mortimer.

E. G. Siggers.

Wm. Murphy
INVENTOR

by C. A. Snow & Co

Attorneys

(No Model.) 2 Sheets—Sheet 2.

W. MURPHY.

OCTAVE COUPLER FOR ORGANS.

No. 322,121. Patented July 14, 1885.

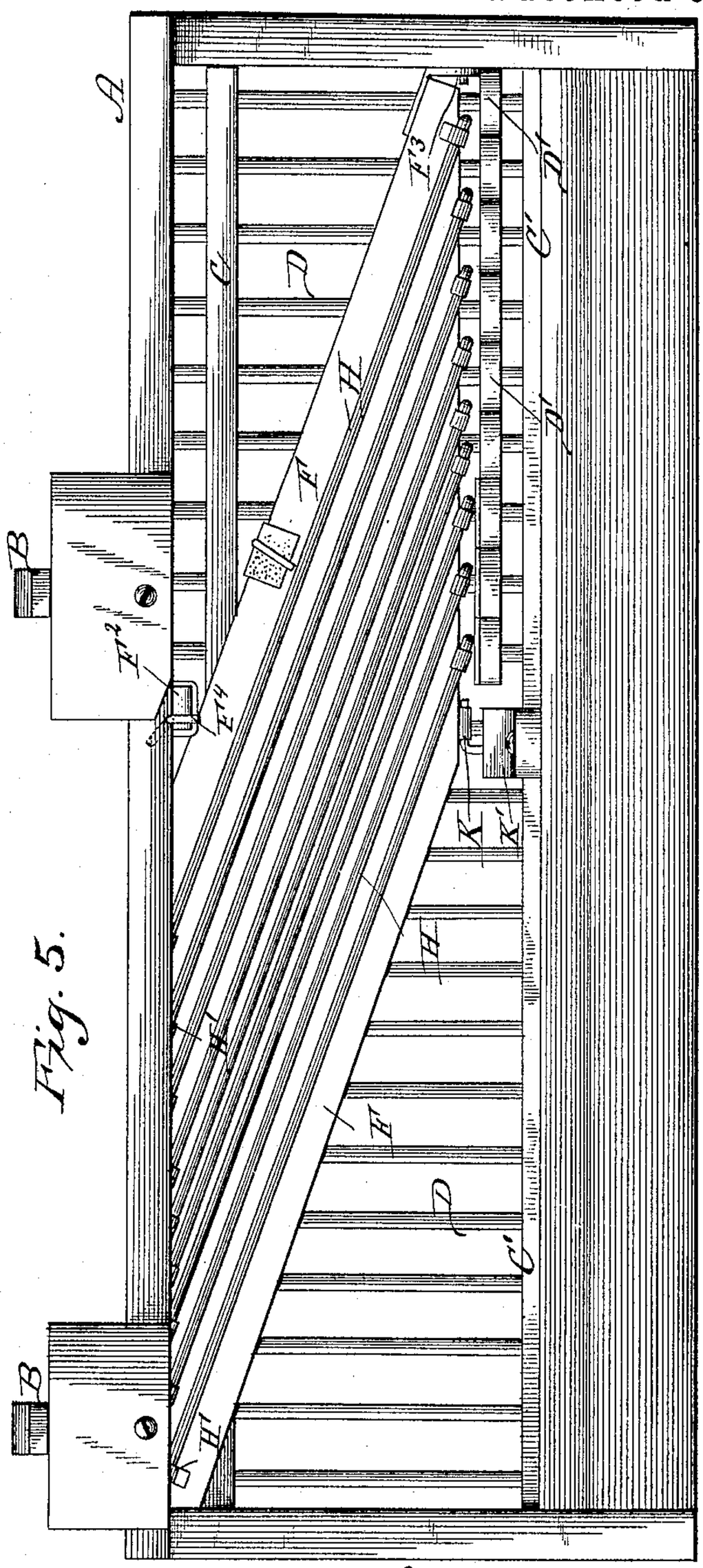


Fig. 5.

WITNESSES

C. F. Dashiell

J. W. Garner

INVENTOR

Wm Murphy.

By C. A. Snow & Co

Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM MURPHY, OF ST. JOHN, NEW BRUNSWICK, CANADA.

OCTAVE-COUPLER FOR ORGANS.

SPECIFICATION forming part of Letters Patent No. 322,121, dated July 14, 1885.

Application filed December 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM MURPHY, a subject of the Queen of Great Britain, residing at St. John, in the county of St. John and Province of New Brunswick, Canada, have invented a new and useful Improvement in Octave-Couplers for Reed-Organs, of which the following is a specification, reference being had to the accompanying drawings.

My invention has relation to couplers for reed-organs; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a view in perspective of parts of an organ-action embodying my improvements. Fig. 2 is a detail sectional view on an enlarged scale of a portion of the parts illustrated in Fig. 1. Fig. 3 is an enlarged detail view of one of the tracker-pins and its button, and Fig. 4 is a vertical sectional view taken in the direction of the length of the keys. Fig. 5 is a rear elevation.

Referring by letter to the accompanying drawings, A designates a portion of the organ-case, and B is the key-frame of the same. In the illustration enough only of an organ is shown to fully illustrate my improvements, as the manner of applying them will be readily understood by persons skilled in the art of organ-building.

C C′ designate the pitmen-frames in which the pitmen D work in perforations made for them. Each pitman D is provided near its lower end with a button, D′. The upper ends of the pitmen D enter eyes in buttons D^3, secured to the under faces of the key-levers E. These buttons D^3 are prevented from turning on their pivots by small brace-wires D^4, entering the sides of the buttons D^3 and the under faces of the key-levers E.

F designates a hinged or pivoted (preferably diamond-shaped) board, which is shown arranged in the rear of the pitmen-frames in this instance; but it may be arranged in the front of the pitmen-frames, and will operate equally as well, and if so arranged will not be a departure from the character of the invention.

To the face of the board F farthest from the pitmen-frames C C′ the double tracker-pin rods H are secured in bearings H′. The tracker-pin rods H have the points of their arms H^3 at their lower ends flattened, and these flattened ends rest upon the buttons or collars D′, near the lower end of the tracker-pins D. The upper ends of the tracker-pin rods H have curved arms H^2, which extend over the upper pitman-board and between the tracker-pins D, and engage the under faces of the buttons D^3 on the under faces of the key-levers E.

The upper edge of the board F is connected to a sliding arm, F^2, which extends back in rear of the keys.

The bearings H′ for the tracker-pin rods H are first driven into the board F, the rods H laid in place thereon, and their other ends are then turned in over the rods H and driven into the board F, making a simple and secure bearing for said rods.

The board F, in addition to being hinged at its middle to the arm K, rising from the block K′, is also hinged or pivoted at its lower end, as at F^3, to the organ-action, which gives it additional certainty of action and greater durability.

The outer end of the arm F^2 is secured by a pivoted bent pin, F^4. When the depending end of said pin is swung up out of contact with the end of the arm F^2, said arm can be drawn outwardly a distance sufficient to incline the board F and withdraw the ends of the arms of the tracker-pin rods out of contact with the buttons D′ and D^3 and throw the coupler off.

The lower ends of the tracker-pins rest on the valves V, which are of the usual construction.

I have found by actual test and comparison that it requires but little more pressure to press the keys down in my construction when the coupler is on than it does in the constructions heretofore made when the coupler is off, for the reason that it brings the weight that is required to press the keys down directly under the center of the keys, or at a point where the least weight is required to operate the same; and, at the same time, by using only one wire or lever, both ends of the same resting on or under the buttons on the tracker-pins, when one key is pressed down upon, the octave

either above or below, as the case may be, goes down with it and increases or nearly doubles the power of the instrument. The coupler is made in two sections, the one coupling up and the other coupling down from or near the center of the key-board; but the coupler may be put in so as to couple throughout the key-board in either direction, up or down. The levers lie in an inclined position one above the other, but do not touch. Further, they occupy a space not otherwise used, and take up but little space in the action.

This coupler can be applied to organs of different constructions with but a slight change and at but little expense.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination of the tracker-pins having the buttons near their lower ends, the keys having the buttons D^3 on their under sides, said buttons being provided with openings to receive the upper ends of the tracker-pins, the hinged board F, and the tracker-pin rods journaled thereon, and having arms bearing against the buttons on the keys and tracker-pins, substantially as described.

2. The combination of the tracker-pins having the buttons near their lower ends, the keys having the buttons on their under sides, the hinged board F, the arm F^2, secured to the free edge of the board F, for inclining said board, and the tracker-pin rods journaled on the hinged board, and having arms bearing against the buttons on the keys and tracker-pins, substantially as described.

3. The combination of the tracker-pins having the buttons near their lower ends, the keys having the buttons on their under sides, the hinged board F, the sliding arm F^2, secured thereto, the bent pivoted pin F^4 for locking the outer end of the arm F^2, and the tracker-pin rods journaled on the hinged board, and bearing against the buttons on the keys and tracker-pins, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

WILLIAM MURPHY.

Witnesses:
FRED P. WETMORE,
MONT MCDONALD.