

(No Model.)

O. H. BOLLMAN.
MUFFLER FOR PIANOS.

No. 519,983.

Patented May 15, 1894.

Fig. I.

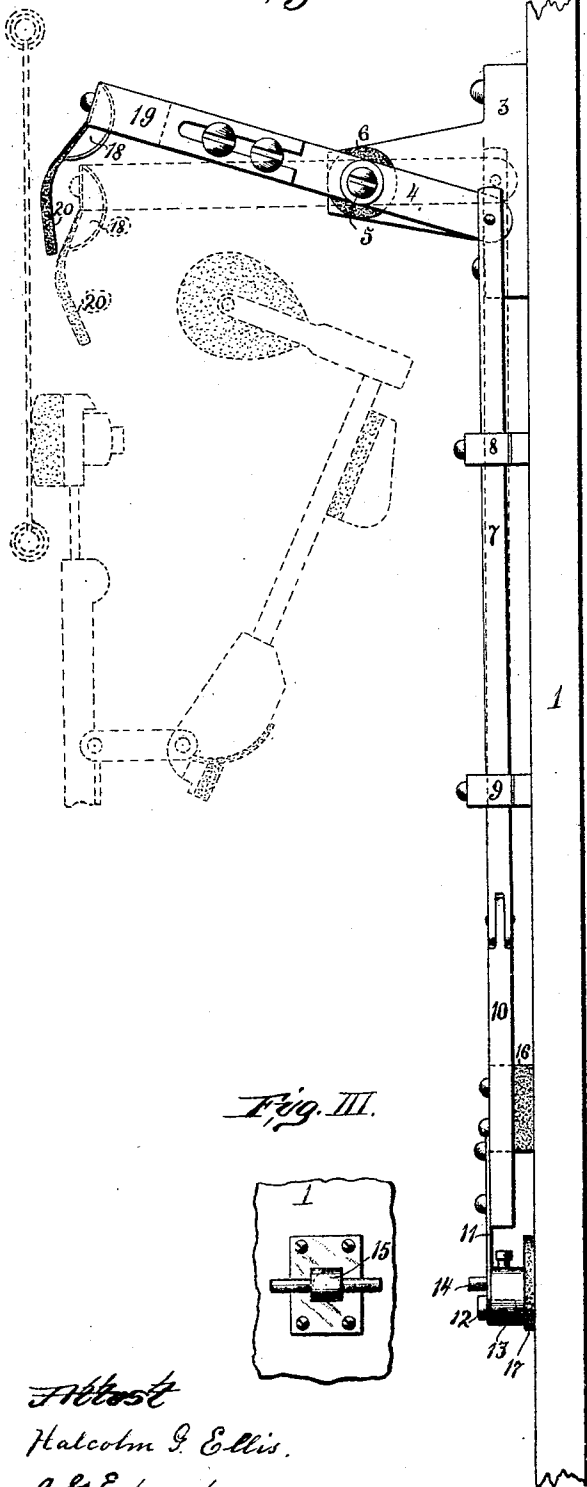
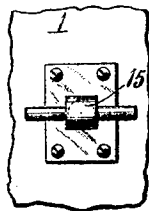


Fig. III.



Attest
Harcotm G. Ellis.
C. G. Edwards.

Fig. II.

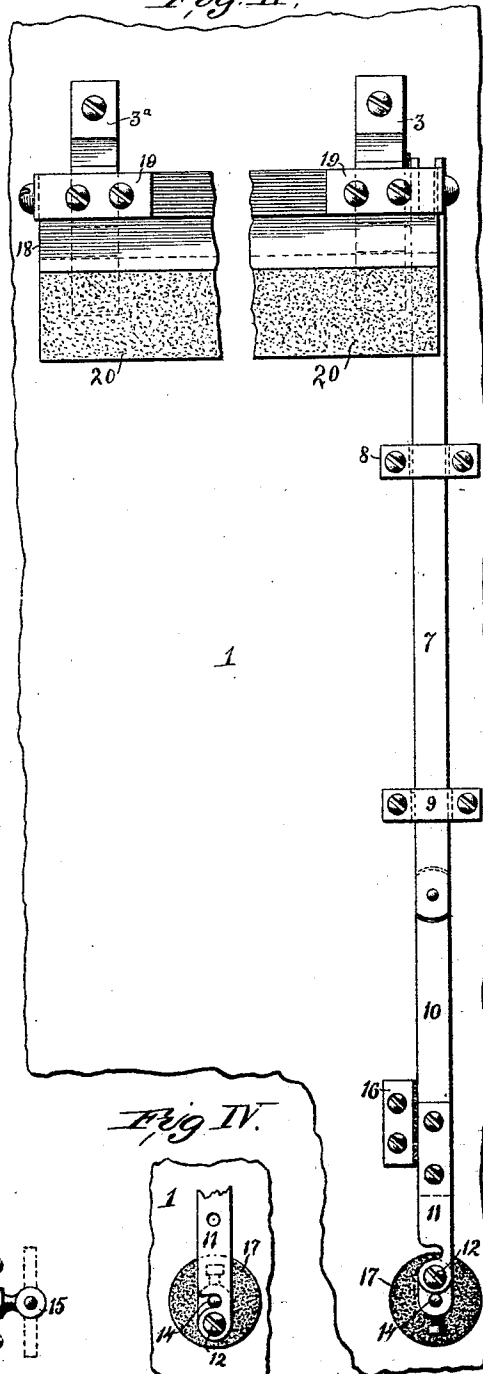


Fig. IV.



Inventor

Oscar H. Bollman

By Knight Bros.

UNITED STATES PATENT OFFICE.

OSCAR H. BOLLMAN, OF ST. LOUIS, MISSOURI.

MUFFLER FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 519,983, dated May 15, 1894.

Application filed February 23, 1894. Serial No. 501,073. (No model.)

To all whom it may concern:

Be it known that I, OSCAR H. BOLLMAN, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Mufflers for Pianos, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This improvement relates to that form of muffler used in upright pianos, and consists of a long strip of felt supported just above the hammers, and means for raising and lowering the same between the hammers and the strings; this present invention is in the form of an attachment, that can be secured to and operated in a piano, not especially constructed to contain a muffler.

An advantage secured by this improvement over other mufflers consists in the facility with which it can be removed, in order to tune the piano, the entire mechanism of the muffler being secured to the front of the piano, technically known as the front-board. To tune the piano it is only necessary to remove the front-board, which is always done anyway, and the muffler comes with it, in this way saving the tuner the necessity of taking apart the elaborate mechanism so often employed where pedals, stops or levers are used to operate the muffler.

Referring to the drawings:—Figure I is a side elevation of the muffler, the raised position being shown in full lines, and the lowered position being shown in dotted lines. Fig. II is a left hand elevation of Fig. I. Fig. III is a front elevation of the turning handle. Fig. IV is a detail of the crank.

1 is the front-board of the piano, to which are attached two brackets 3 and 3^a. The bracket 3 supports an arm 4 by a screw 5, which serves as a pivot or bearing for the same, and a felt washer 6 between the bracket 3 and the arm 4 surrounds the screw 5, separating the arm 4 and the bracket 3. The inner end of the arm 4 is pivoted to a vertically sliding rod 7, which is supported and held in position by two guide blocks 8 and 9, secured to the front-board 1, the inside of these guide blocks being lined with felt in order to prevent any noisy vibration, and that the parts may always work silently. The lower end of the rod 7 has pivoted to it an extension 10,

which swings in a plane parallel to the front-board 1. To the lower end of this rod 10 is secured a brass plate 11, which is connected by a screw 12, which serves as a crank-pin, to the crank 13. This crank 13 is mounted on a small shaft 14, which passes through the front-board 1, and terminates at the outside in a handle 15.

When the rod 7 is raised, as shown in Fig. II, the block 16 secured to the front-board, serves as a stop to prevent further turning of the handle in one direction, and to lower the rod 7, the handle is turned the other way, the shaft 14 projecting through the crank 13 serves as a stop to the reverse movement of the handle, permitting just a half revolution of the same. A felt washer 17 is inserted between the crank 13 and the front-board 1.

To the outer end of the arm 4, and the outer end of a similar arm, similarly attached to the bracket 3^a, which is at the other end of the front board 1, is secured a rail 18 by brass strips 19, and from the rail 18 depends a strip of felt 20, called an apron.

The operation of this muffler is as follows:—The handle 15 is turned until the crank 13 brings the rod 7 down to its lowest position, as shown in Figs. I and IV, this draws down the inner end of the arm 4, and raises the other end, raising with it the rail 18, and the felt apron 20, in this position the hammers of the piano strike directly on the strings, passing under the felt apron 20 in doing so. To bring the muffler into use the handle 15 is given a half turn, bringing the crank 13 into the position shown in Fig. II; this raises the rod 7, which moves the arm 4, and lowers the rail 18, and the felt apron 20 now occupies a position between the hammers and the strings, as indicated in the dotted lines in Fig. I, and the hammers will no longer directly strike the strings, but indirectly through the felt apron 20, thereby muffling the tone.

The brass strips 19 are made with slots running lengthwise, through which screws pass to hold them to the arms 4, by this means the distance of the felt apron from the strings may be adjusted.

I claim as my invention—

1. The combination in an upright piano of a muffler apron mounted on brackets secured to the front-board, means attached to the

front - board for raising and lowering the apron; and a handle on the front of the front-board for operating the muffler; substantially as described.

- 5 2. A muffler for upright pianos supported on brackets 3 and 3^a secured to the front-board, a vertical sliding rod 7 connected by an arm 10 to a crank 13, and a handle 15 on the front of the front-board for operating the
10 muffler.

3. A muffler for upright pianos secured to the arms 4 by metal strips 19, having slots cut lengthwise in them, so that the apron may

be adjusted at different distances from the strings; substantially as described. 15

4. A muffler for upright pianos mounted on the front-board, and means attached to the front - board for raising and lowering the apron, and metal strips 19 having slots cut lengthwise in them, for adjusting the apron 20 at different distances from the strings; substantially as described.

OSCAR H. BOLLMAN.

In presence of—

A. M. EBERSOLE,

CLARA G. EDWARDS.