

(No Model.)

O. WESSELL, A. NICKEL, & R. GROSS.

PIANO FORTE DAMPER.

No. 312,776.

Patented Feb. 24, 1885.

Fig. 2.

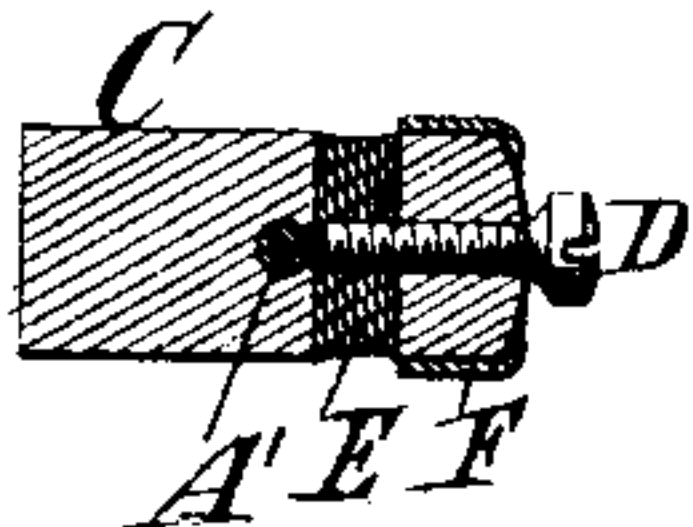


Fig. 1.

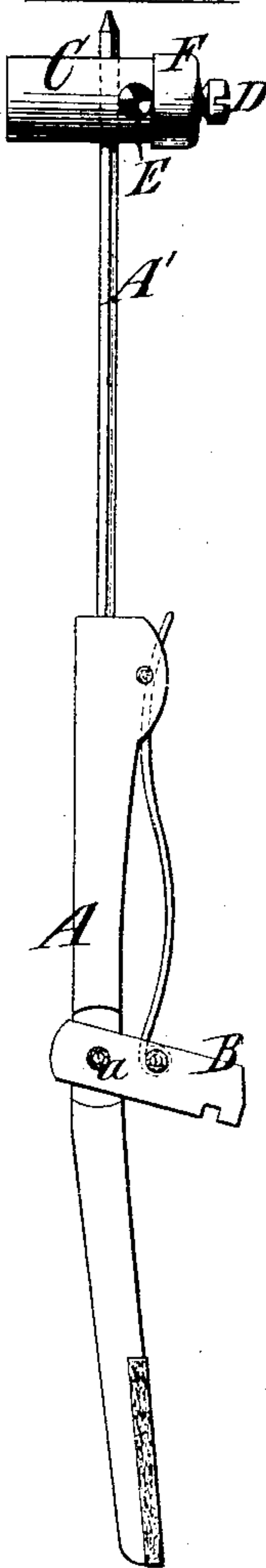
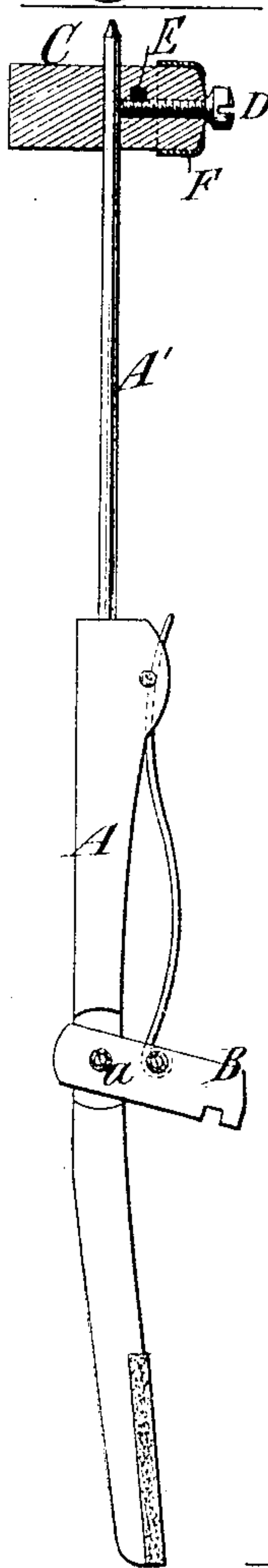


Fig. 3.



Witnesses:

Louis M. F. Whitehead.

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PIANO-FORTE DAMPER.

SPECIFICATION forming part of Letters Patent No. 312,776, dated February 24, 1885.

Application filed April 5, 1884. (No model.)

To all whom it may concern:

Be it known that we, OTTO WESSELL, ADAM NICKEL, and RUDOLPH GROSS, all of the city and county of New York, in the State
5 of New York, have invented a new and useful Improvement in Piano-Dampers, of which the following is a specification.

Our invention relates to piano-dampers in which the wood block which receives the
10 damper-lever through it has inserted in it a nut of metal, rawhide, or other material, with which engages the set-screw employed to secure the block upon the damper-lever. Such a combination of parts is shown and de-
15 scribed in our United States Letters Patent No. 295,317, and dated March 18, 1884, and is very desirable, as it enables the damper-lever to be inserted through the block in a direction transverse to the grain of the wood,
20 while the nut affords a hold for the screw which the latter could not have if inserted in the block lengthwise of its grain and the nut were not used. In some cases, however, and more especially if the block is of cylindric
25 form, with the damper-lever inserted transversely through it, the set-screw, if tightened very strongly against the shank, might cause the block to split behind the nut, in which case the set-screw would no longer hold the
30 block upon the damper-lever; and it is the object of our present invention to prevent splitting of the block at the end at which the screw is inserted and behind the nut.

The invention therefore consists in the combination, with a damper-lever and a block receiving said lever through it in a direction
35 transverse to the grain of the wood, of a nut inserted into the block, a set-screw engaging with the nut and bearing against the lever, and a cap or ferrule applied to that end of the
40 block at which the screw is inserted, all as more fully hereinafter described.

In the accompanying drawings, Figure 1 is a side view of a damper-lever and block embodying our invention. Fig. 2 is a sectional
45 view of the block in a plane transverse to the lever, and Fig. 3 is a side view of a damper-lever and a sectional view of a block embodying our invention in a slightly-modified
50 form.

Similar letters of reference designate corresponding parts in all the figures.

A designates the main portion or butt of the damper-lever, which is pivoted at *a* to the
55 flange B; and A' designates the wire portion

of the lever, on which the block C is fitted. The lever A' extends through the block C in a direction transverse to the grain of the wood, and the block, as here shown, is of cylindric form. The block is secured upon the lever
60 by a set-screw, D, which is inserted at one end thereof in a direction transverse to the lever, and which engages with a nut, E, inserted in the block in a direction transverse to the grain. This nut E may consist of a plug or
65 piece of lead or other metal, of rawhide, of a piece of wood separate from and inserted into the block, or of any other material which will adequately hold the screw D engaging with it.

In Figs. 1 and 2 the nut is of such size and so placed as to receive the screw D directly through it, and we consider this most desirable; but in some cases the nut E may consist of a smaller piece inserted through the block,
70 and with one side of which the screw D engages, as shown in Fig. 3. If the screw D is tightened strongly against the lever A', there is a possibility of the block C splitting behind the nut at the end at which the screw is in-
80 serted; and to prevent this we apply to that end of the block a cap or ferrule, F, which may be of brass or other metal, and which is driven or forced upon the end of the block, as shown in all figures of the drawings. The
85 liability of the block splitting behind the nut is lessened by making the block longer, so that the nut is farther from the end; but this necessitates a longer screw, D, and by the use of the cap or ferrule we are enabled to
90 make the block short and of a length behind the nut, which would be impracticable if the cap or ferrule were not used.

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination, with a damper-lever and a block receiving said lever through it in a direction transverse to the grain of the wood, of a nut inserted into the block, a set-screw engaging with said nut and bearing against the
100 lever, and a cap or ferrule applied to that end of the block at which the screw is inserted, substantially as and for the purpose herein described.

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Witnesses:

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