

G. STECK.
Piano-Damper Attachment.

No. 211,115.

Patented Jan. 7, 1879.

Fig. I.

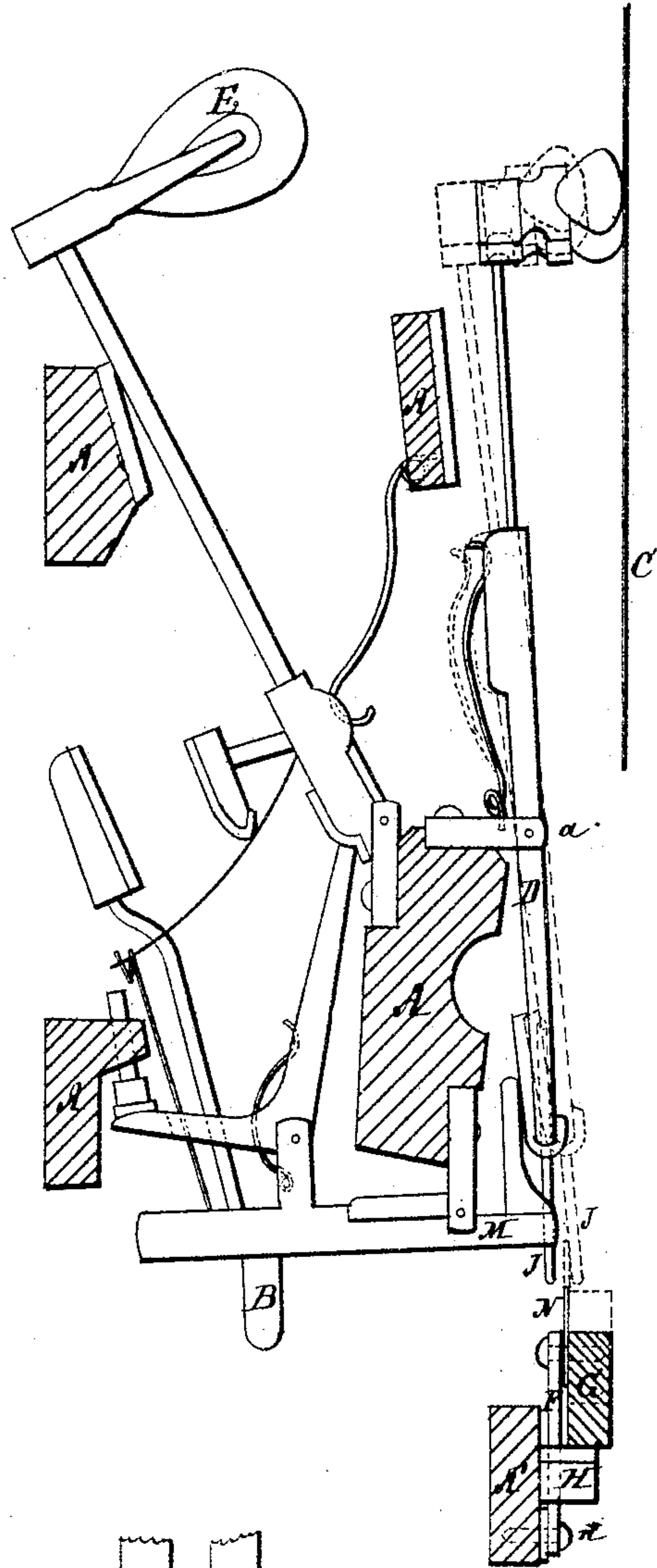
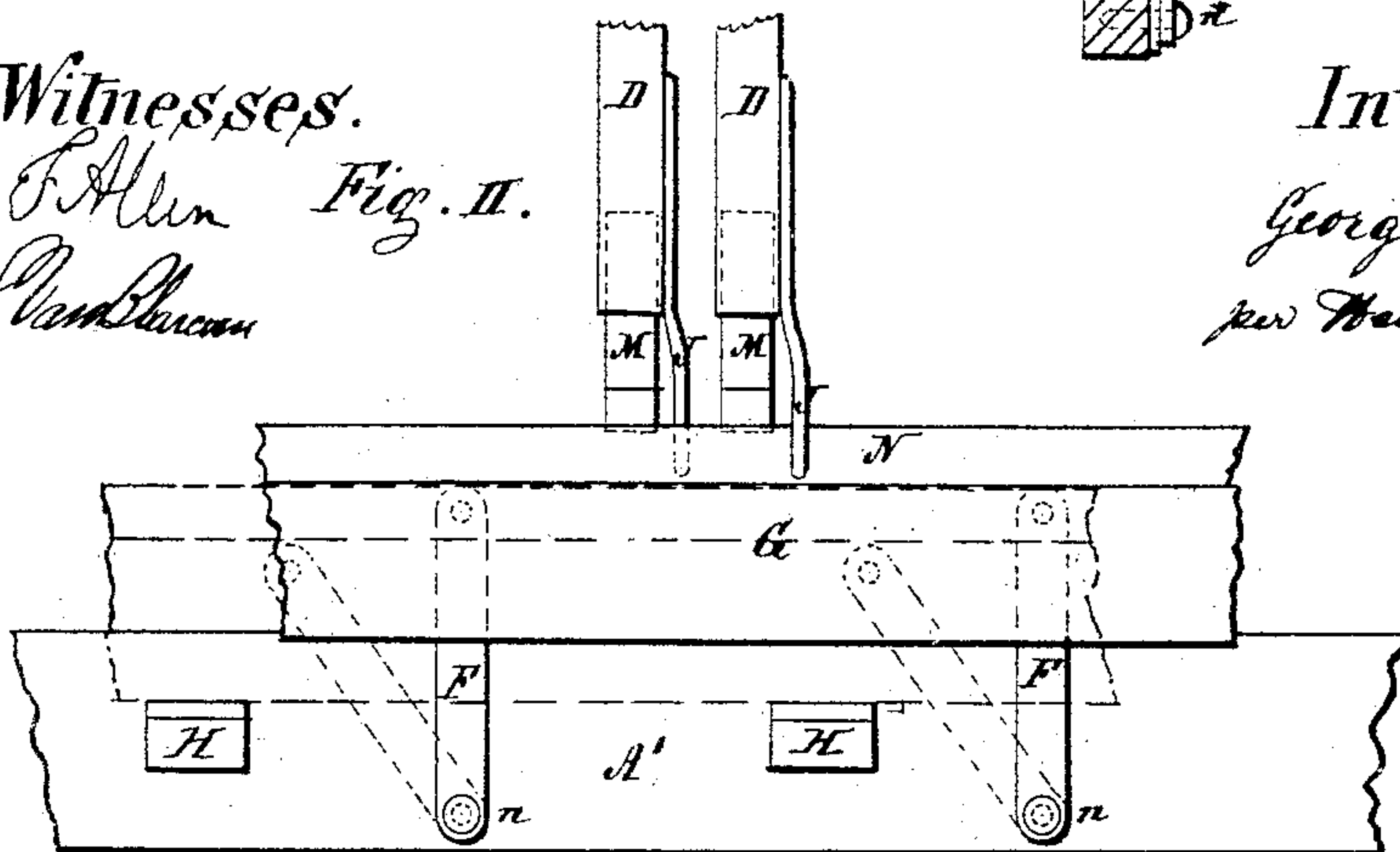


Fig. II.



Witnesses.

John F. Allen
Abram Van Buren

Inventor.

George Steck
per Henry C. Rooden
Attorney

UNITED STATES PATENT OFFICE.

GEORGE STECK, OF NEW YORK, N. Y.

IMPROVEMENT IN PIANO-DAMPER ATTACHMENTS.

Specification forming part of Letters Patent No. **211,115**, dated January 7, 1879; application filed August 24, 1878.

To all whom it may concern:

Be it known that I, GEORGE STECK, of New York, in the State of New York, have invented certain new and useful Improvements Relating to Piano Attachments, of which the following is a specification:

The object of my invention is to hold up or away from the strings any number of the dampers at will.

This attachment works additional to and independently of the ordinary arrangement for holding away all the dampers, and serves in cases where only one or more keys or any number less than the whole are to be "undamped" or played "forte," while the rest remain subject, as usual, to the restraint of the proper damper as soon as the key is liberated.

My improvement applies to what are known as "upright pianos," or to any similar instrument where the action is constructed and arranged in a corresponding manner.

My invention consists in the arrangement of a bar having an elastic projecting part and supported on hinged levers, which, when said bar is operated by a suitable treadle, elevates the same, so as to catch any projecting wires attached to the end of the usual dampers, and hold them so that those dampers are inoperative while the others remain unaffected. This mechanism is arranged in a part of the piano where it is perfectly free from liability to interfere with any of the other parts of the action.

In the accompanying drawing, Figure I is vertical section of the action-frame with my improved attachment. Fig. II shows a portion of the attachment-bar.

A are fixed parts. B is the projection acted upon by the keys. C represents the strings, and D the usual dampers, turning on centers *a*. E are the hammers. All these parts, as well as the other mechanism connected therewith and forming the "action," are of the usual construction.

At the lower end of each damper D a wire, J, is attached.

To a fixed part, A', levers or links F are attached, turning freely on their joint-pins *n*, and supporting or carrying at their upper ends a bar, G, to which an india-rubber or

similar elastic strip, N, is attached, projecting some little distance above the bar G. This projecting elastic strip N is situated close below and a little back of the lower ends of the wires J.

A side motion, communicated to the bar G by means of a proper treadle or any other operating means, (not shown in the drawing,) will raise said bar and its elastic strip N through the action of its connecting links or levers F.

H are padded rests or stops for the bar G, attached to the fixed part A'.

When at any moment the player wishes to render a few keys "hard" or "forte," he operates, directly after having pressed such keys, the treadle, which is connected with the bar G, whereby, as above described, this bar G, and with it the projecting elastic strip N, is elevated. By pressing upon the key, the wire J, at the end of the damper D, has been brought a little on the other side of the path of the elastic strip N; and by the elevation or raising up of this strip N, these wires J of the dampers, in connection with the keys played or pressed upon, are caught and held fast, so that these dampers are inoperative, and the corresponding keys are undamped or hard, while all others remain unaffected.

On liberating the treadle or other mechanism acting on the bar G, the same and its projecting elastic strip N will immediately fall down until stopped by the rests H, when all the keys serve again as usual.

My improvement is placed in that part of the piano where it is perfectly free from any part of the action, and allows ample space without possibility of mischief, and allows full facility for any repairs.

I have not shown any device for connecting and operating the bar G, as any of the usual pedal or treadle devices commonly employed for that purpose may be arranged.

The wires J are shown attached on the side of the damper, and I prefer to so arrange them, although the same may be attached on the end and bent so as to clear the end of the levers M.

I do not claim a yoke or frame provided

with a rubber-coated wire, and arranged to slide up and down in inclined guides to move across the path of the damper-extensions; but

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

In combination with wires J, forming extensions of the dampers D, the bar G, provided

with a projecting elastic strip, N, and hinged to links F, attached to a fixed part, A', arranged to operate in the manner and for the purpose substantially as described.

GEORGE STECK.

Witnesses:

HENRY E. ROEDER,
J. B. NONES.