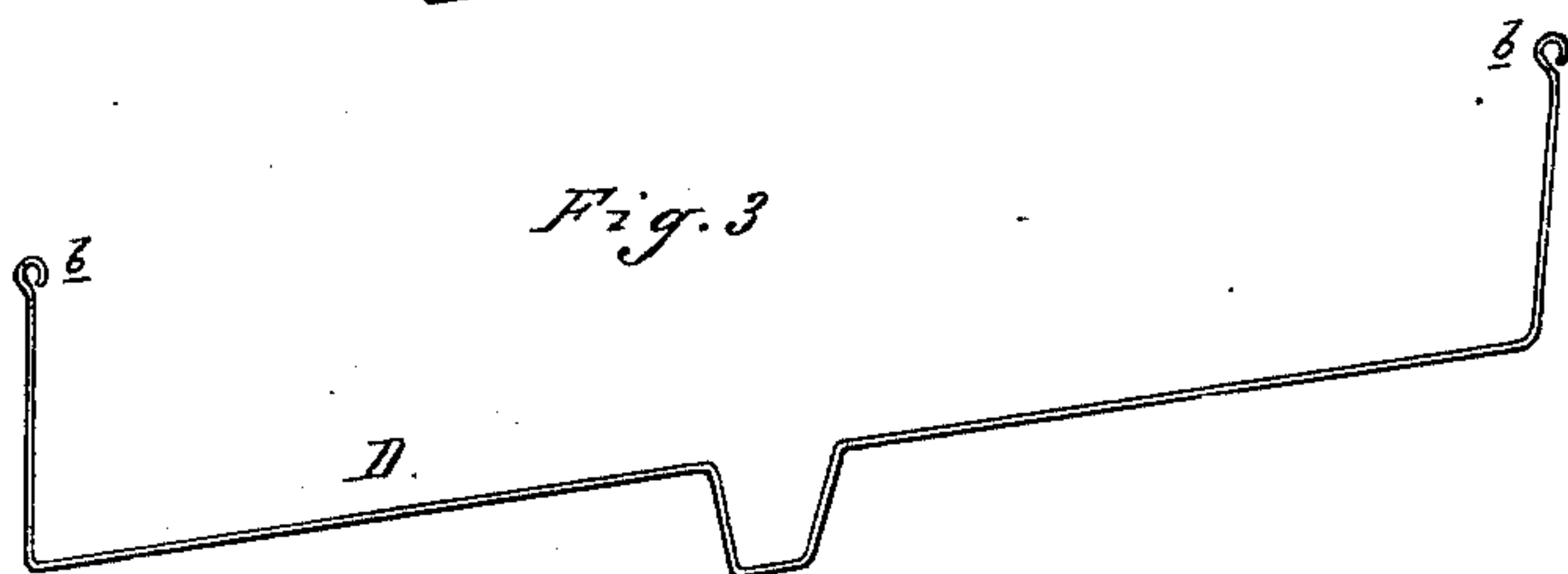
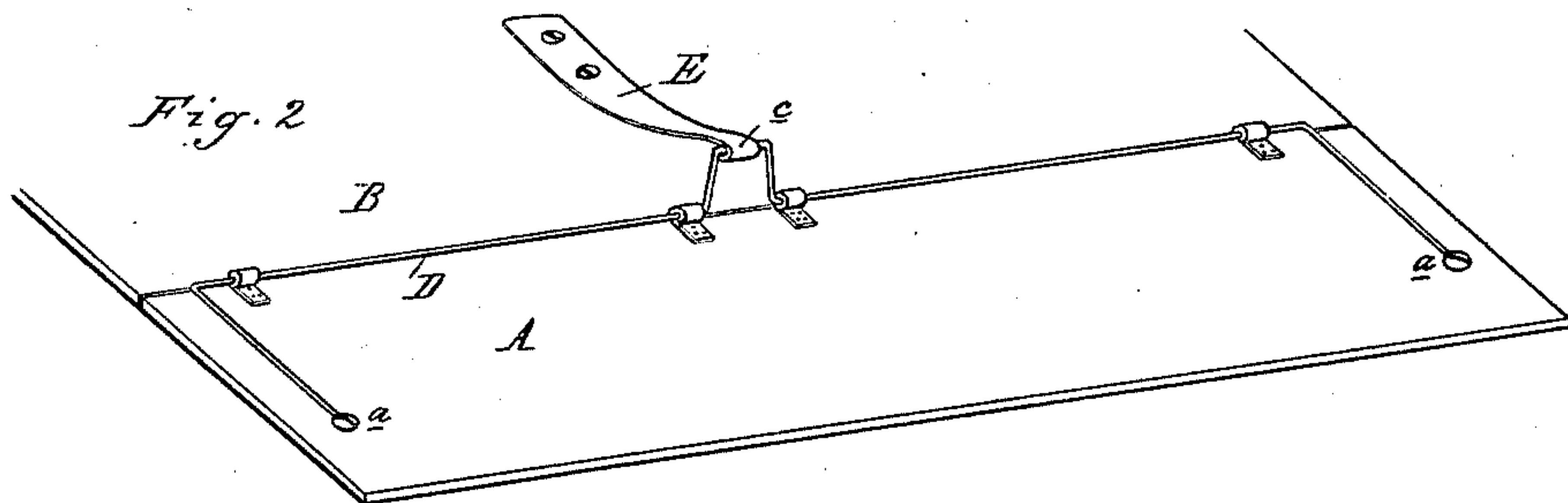
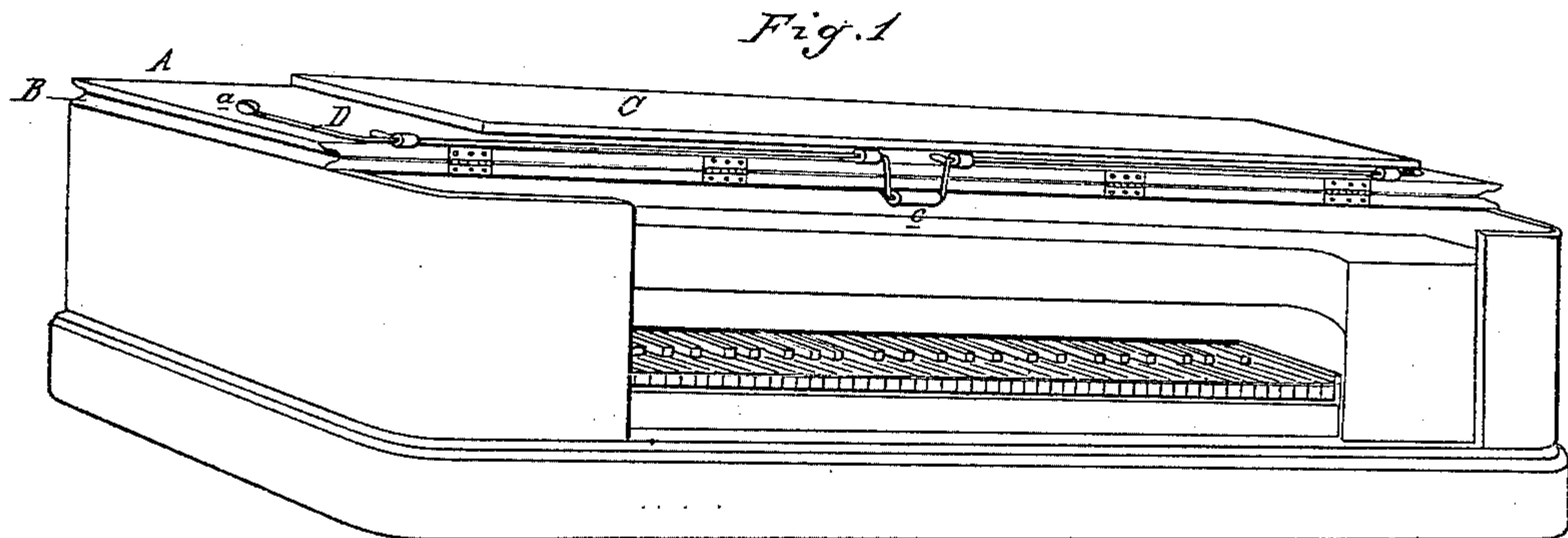


E. B. SCATTERGOOD.  
Piano-Lid.

No. 223,173.

Patented Dec. 30, 1879.



Attest:  
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# UNITED STATES PATENT OFFICE

EDWARD B. SCATTERGOOD, OF ITHACA, MICHIGAN.

## IMPROVEMENT IN PIANO-LIDS.

Specification forming part of Letters Patent No. **223,173**, dated December 30, 1879; application filed July 10, 1879.

*To all whom it may concern:*

Be it known that I, EDWARD B. SCATTERGOOD, of Ithaca, in the county of Gratiot and State of Michigan, have invented an Improvement in Piano-Lids, of which the following is a specification.

The nature of this invention relates to a new attachment to piano-lids, by means of which the opening of the same is rendered comparatively easy.

Piano-lids are usually made of very dense and heavy lumber, so much so that great strength is required to open the piano for practice; and the object of my invention is to render this operation easy.

The invention consists in providing and securing to the piano-lid, at the joint of the two main parts of the same, a horizontal torsional spring, which assists in raising the front part of the lid, and serves to retard the movement of the same in its fall upon the rear part of the lid.

In the drawings, Figure 1 represents the body of a piano with the lid open to expose the key-board. Fig. 2 is a perspective view of the under side of the piano-lid, with the spring attachments as they appear when the lid is closed. Fig. 3 is a view of the torsional springs detached.

In the accompanying drawings, which form a part of this specification, A represents that portion of the piano-lid which must be opened

and turned back upon the other portion, B, to expose the key-board, and to this portion A is hinged the usual apron C, which, when the lid is closed, forms a portion of the piano-front, and when the lid is open folds back upon the under side thereof. To the under side of the portion A are secured the torsional wire springs D, substantially of the form shown, by means of the screws *a* and fixed loops *b*. The center ends of these springs pass through the loop *c* in the end of the leaf-spring E, the rear end of which is secured to the under side of the portion B of the lid.

The torsion of these springs should be so regulated that when the piano-lid is closed the springs will not lift it, and should be so adjusted as to overcome the inertia of the lid when slightly assisted by the operator. The same result will be found, when the lid is open and folded back, in closing the same.

What I claim as my invention is—

The combination, with the parts A B of a piano-lid, hinged together, of a horizontal torsional spring secured at the joint of such parts, and adapted to assist in raising the part B from over the key-board and to retard the movement of such part B in its fall upon the part A, substantially as described and shown.

EDWARD B. SCATTERGOOD.

Witnesses:

WM. L. PHILLIPS,  
W. B. SCATTERGOOD.