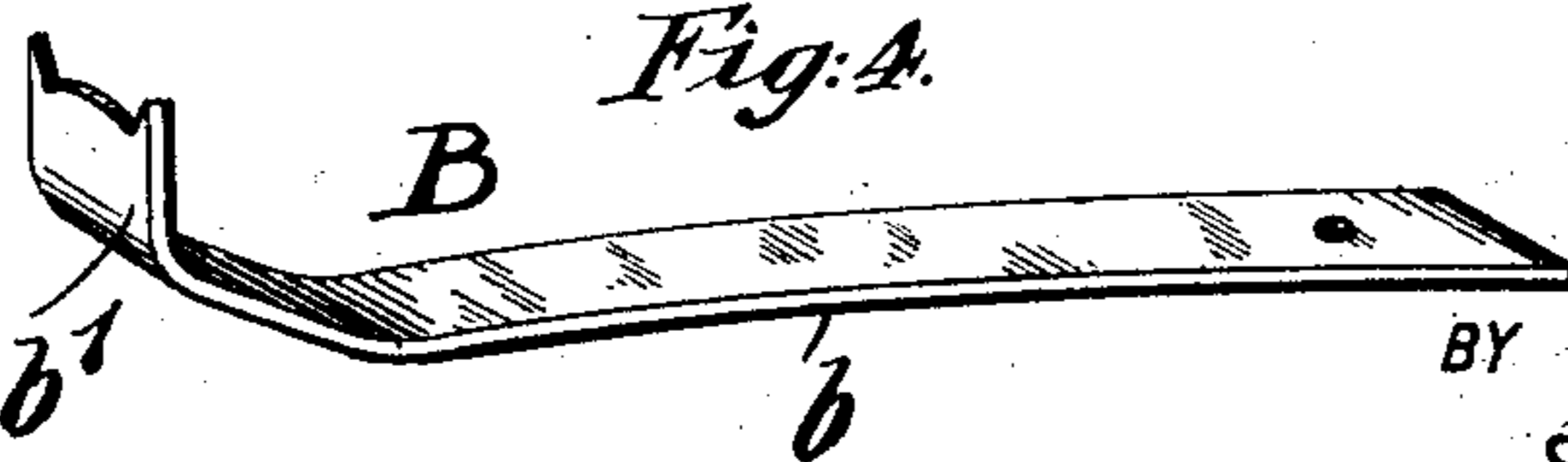
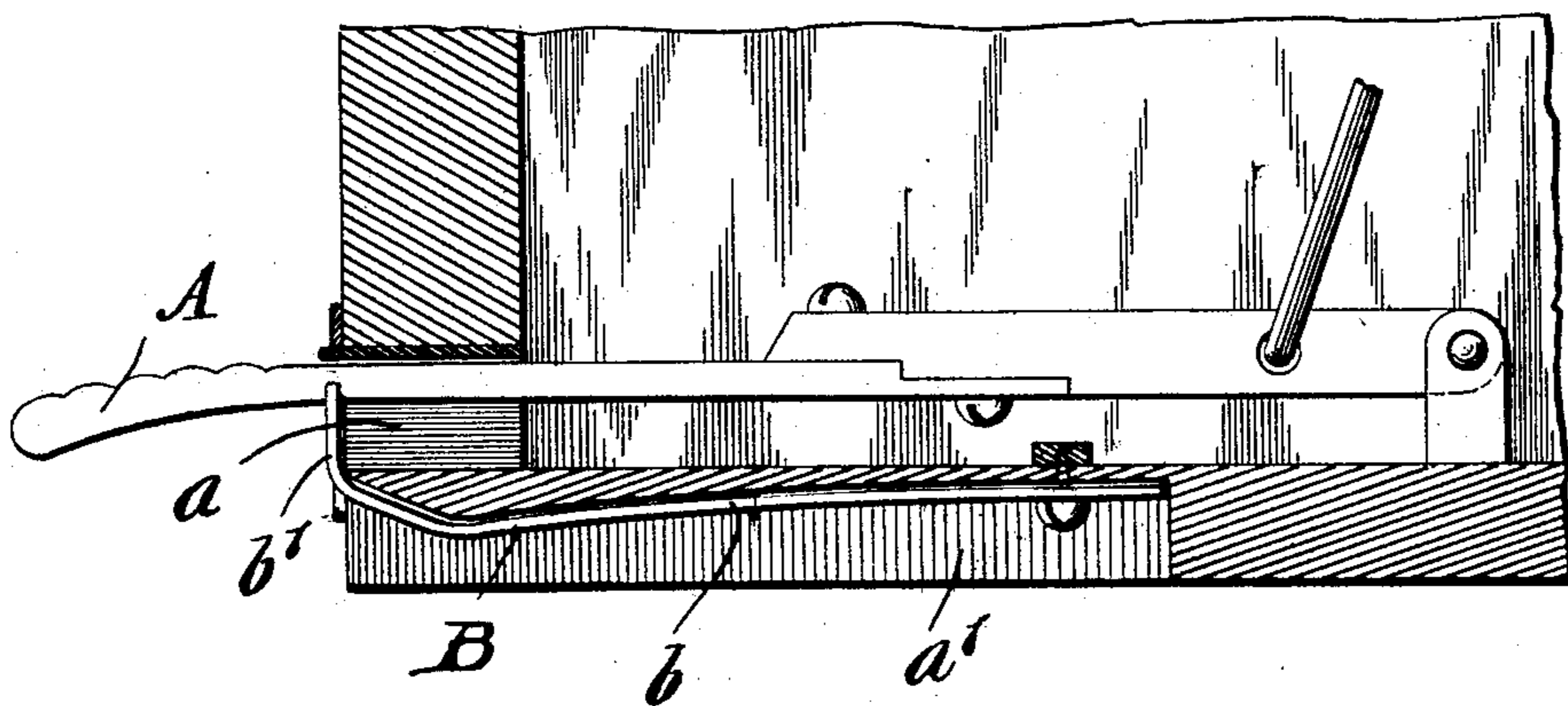
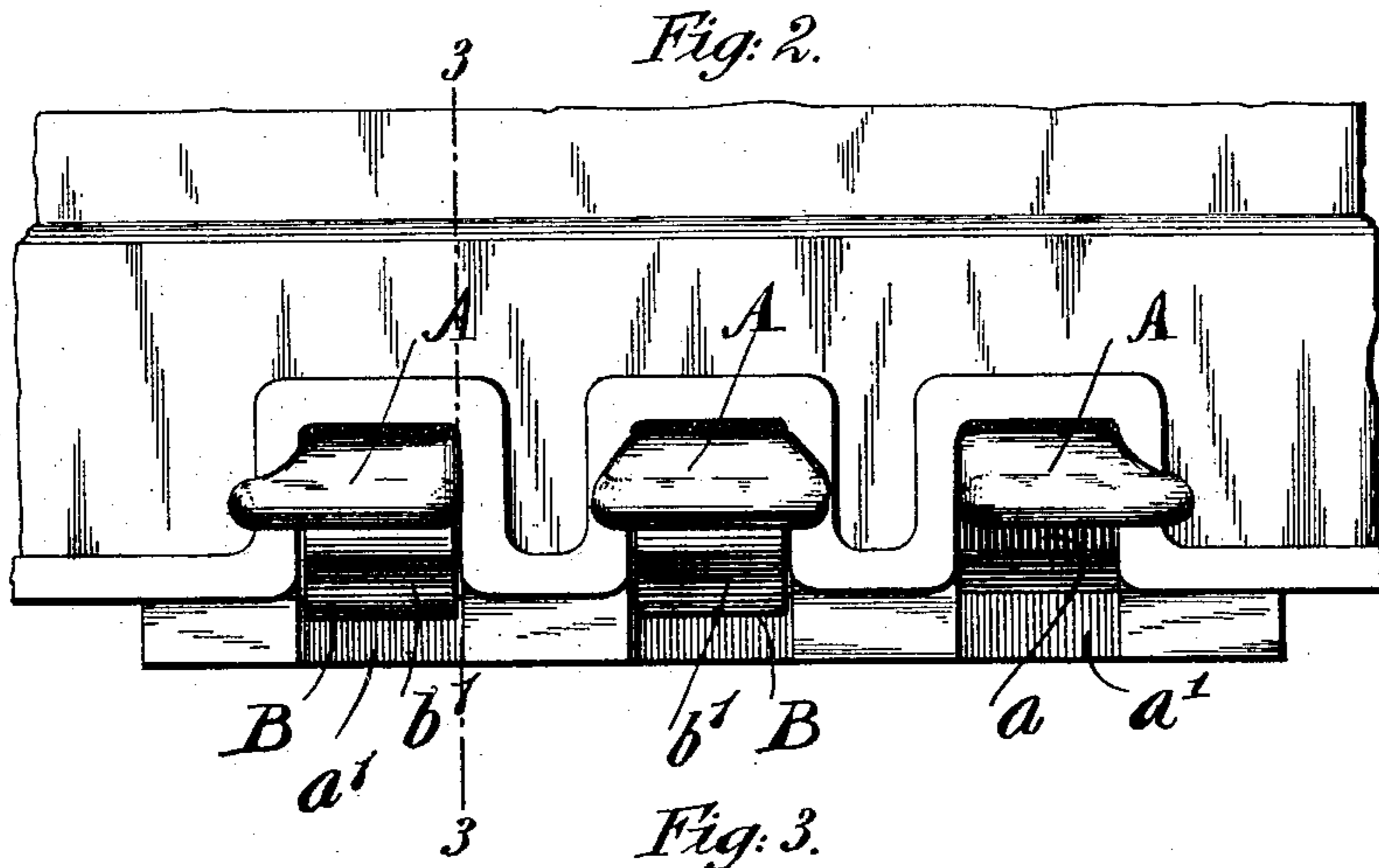
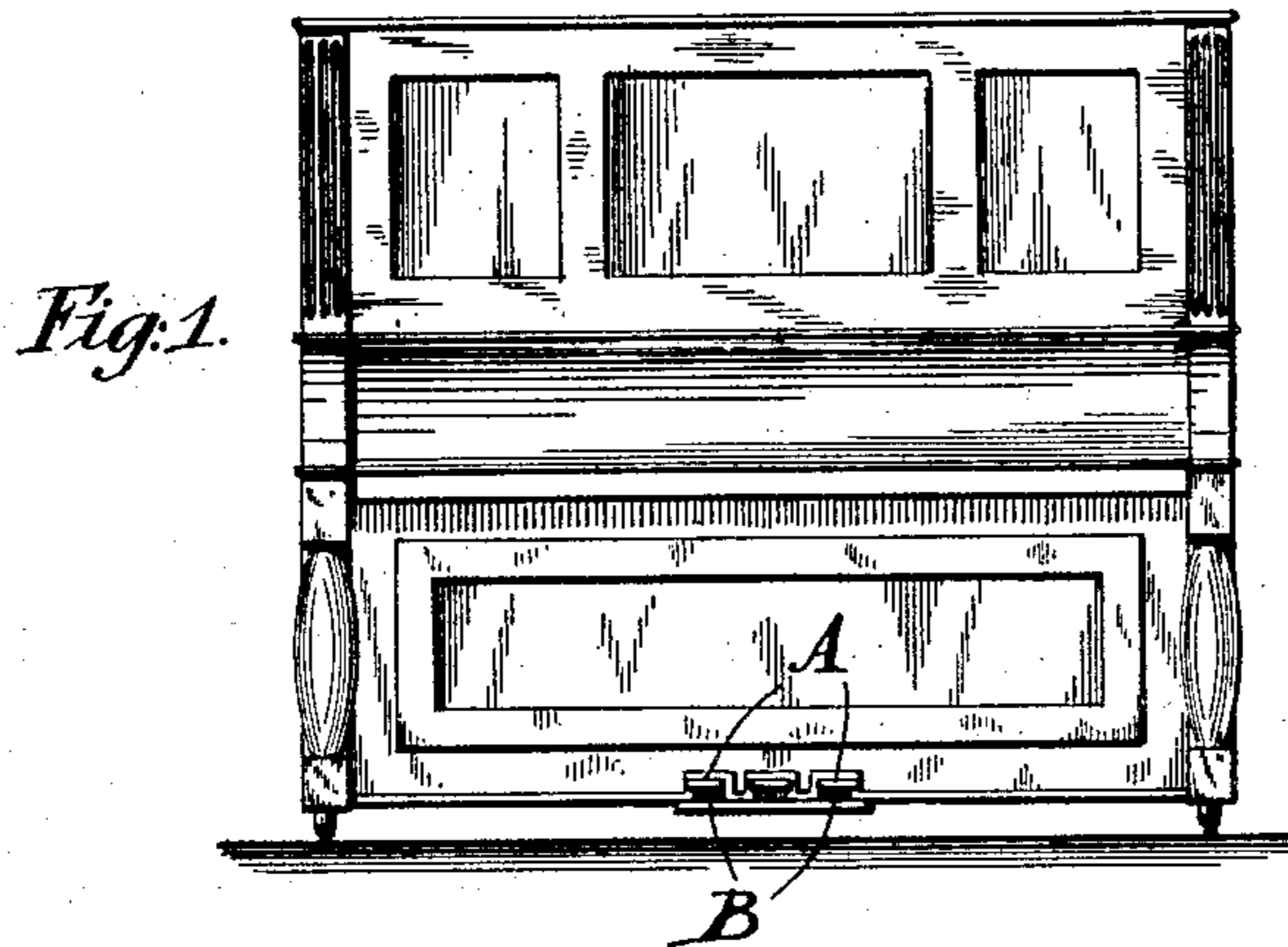


No. 701,714.

Patented June 3, 1902.

R. GROSS.
PEDAL ATTACHMENT.
(Application filed Jan. 16, 1902.)

(No Model.)



WITNESSES:
Walter Woelheim
C. Bradway

INVENTOR

Rudolph Gross.

BY

George W. Hale.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RUDOLPH GROSS, OF BRENHAM, TEXAS.

PEDAL ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 701,714, dated June 3, 1902.

Application filed January 16, 1902. Serial No. 89,985. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH GROSS, a citizen of the United States, residing in Brenham, in the county of Washington and State of Texas, have invented certain new and useful Improvements in Pedal Attachments, of which the following is a specification.

This invention relates to an improved attachment for pianos, organs, or other instruments provided with pedals, said attachment being designed for the purpose of closing the openings below the pedals, so as to prevent mice and other vermin from entering the instrument and damaging the same. The attachment also acts in the nature of a dust-protector and an auxiliary spring for the pedals, and for these purposes the invention consists of a flat spring provided with an upwardly-bent forward portion having a recess in the end edge thereof for engaging the bottom and sides of the pedal, the spring being provided with a perforation at the opposite end and fitted to the under side of the piano-casing below the pedal and extending into a recessed portion provided thereat, said upwardly-bent end being adapted to close the pedal-opening, as will be fully described hereinafter and finally pointed out in the claims.

In the accompanying drawings, Figure 1 represents a front elevation of an upright piano with my improved pedal attachment in position thereon. Fig. 2 is a front view of the pedals, drawn on a larger scale, showing the attachment employed only on the left hand and the central pedals. Fig. 3 is a vertical transverse section, drawn on a larger scale, on line 3-3, Fig. 2; and Fig. 4 is a perspective view of the spring attachment shown as detached from the pedal.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the pedals of a piano, organ, or other pedal instrument. The pedal-openings *a* in the casing, through which the pedals project, are closed by means of my improved attachments B, each of which consists of a flat spring, the shank *b* thereof being seated in the recess *a'* at the under side of the casing, as shown in Fig. 3, said recesses *a'* being arranged below the pedals. The front ends *b'* of the springs are bent in upward direction and are recessed, so as to fit the bottom and side of the pedal-shank, as shown clearly in Figs. 3 and 4. The front edge of the casing at the re-

cesses *a'* is preferably beveled, so as to conform to the shape of the spring. The upwardly-bent ends of the springs are arranged to fit tightly over the openings *a* and prevent the ingress of dust into the interior of the instrument as well as keeping out vermin. As the front end of each spring attachment B supports a pedal, it serves as an auxiliary spring for returning the same after it is depressed. The attachment can also be used without the interior spring-actuating means for the pedals.

The spring attachment is simple and inexpensive, forming a valuable and effective means for protecting the interior of pianos, &c., against damage by dust or by vermin, and can be used by manufacturers instead of the usual spring-actuating pedal devices, if so desired, or it can be readily attached to pianos which are already in use.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A pedal attachment for pianos, consisting of a flat spring having one end upwardly bent and recessed at the end edge thereof to engage the bottom and sides of the pedal-shank, and having an aperture at its opposite end, substantially as set forth.

2. The combination, with a pedal and a recess in the bottom of the casing of an instrument provided with pedals, of a spring having a shank which is attached at one end in said recess and having the up-bent end thereof retained in contact with the under side of said pedal, substantially as set forth.

3. In a piano having pedal-openings in the casing thereof, the combination, with the pedals, of auxiliary springs for said pedals arranged below the same and being secured to the under side of said casing, the outer ends of said springs being bent upwardly and recessed to engage with said pedals, said upwardly-bent ends being arranged exteriorly of and adjacent the front of said casing and covering said pedal-openings, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

RUDOLPH GROSS.

Witnesses:

R. H. BURCH,
W. R. EWING.