

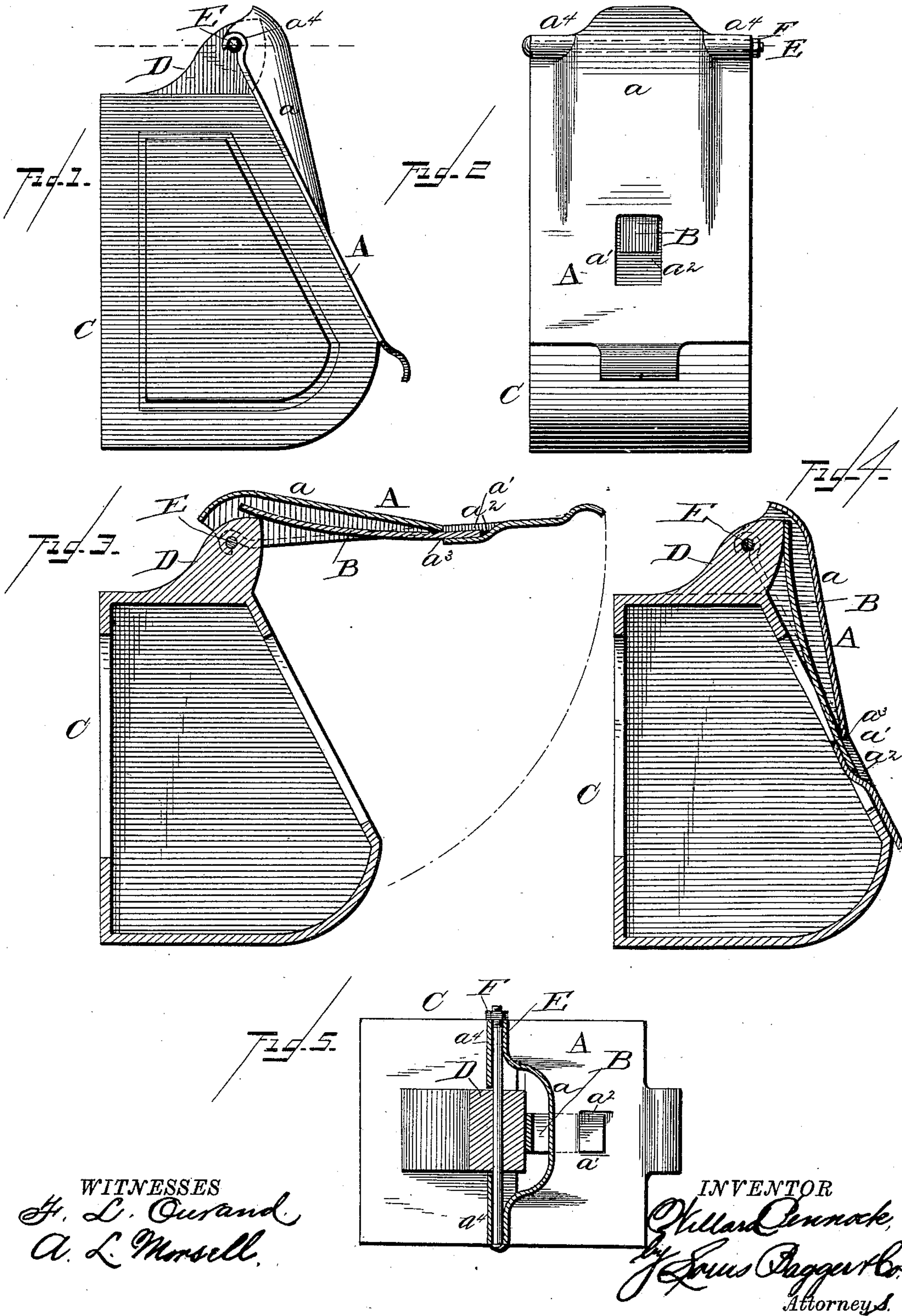
(No Model.)

2 Sheets—Sheet 1.

W. PENNOCK.
CAR AXLE BOX LID.

No. 428,944.

Patented May 27, 1890.



WITNESSES
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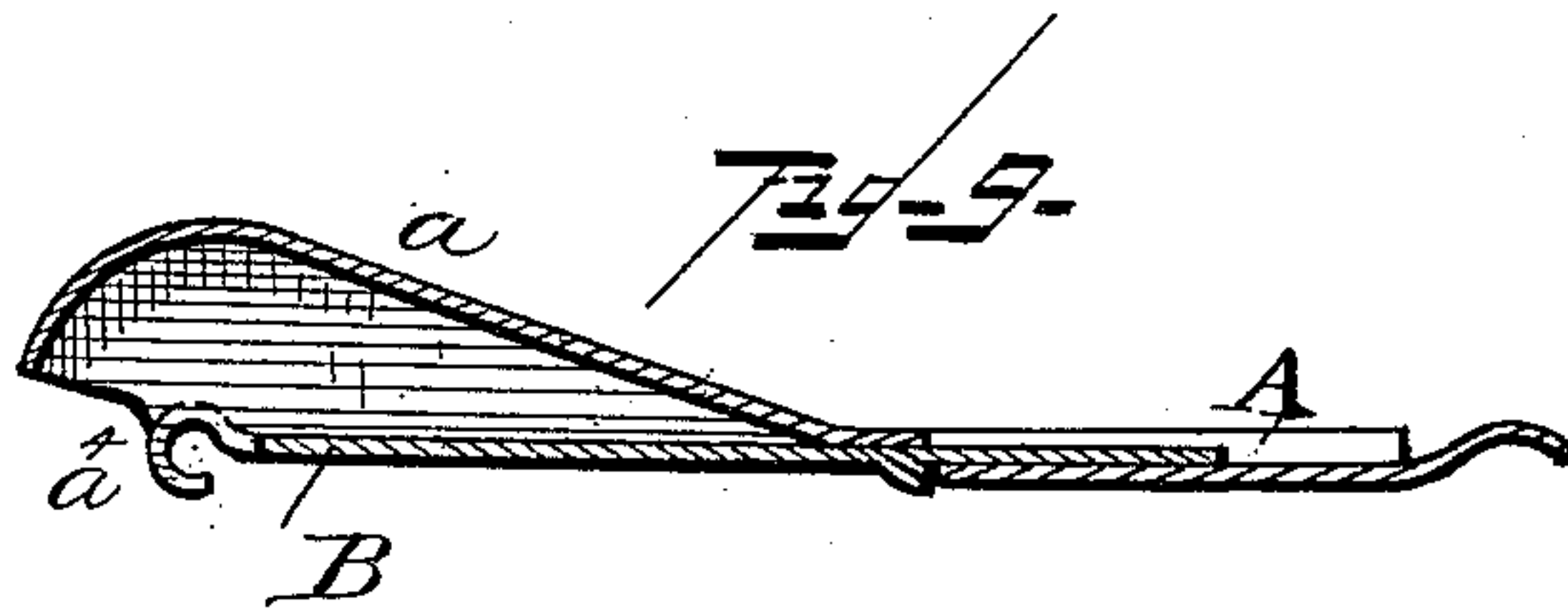
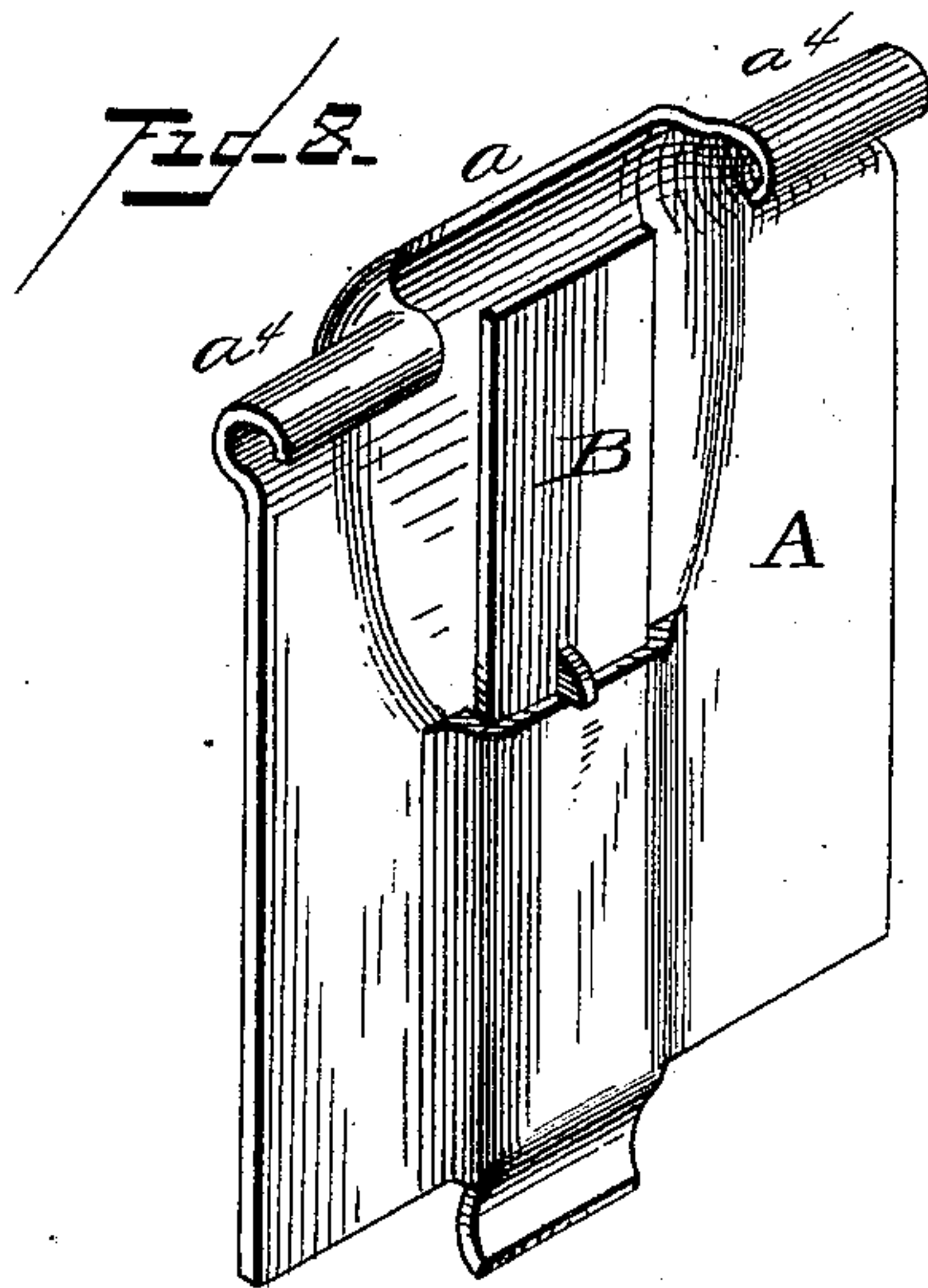
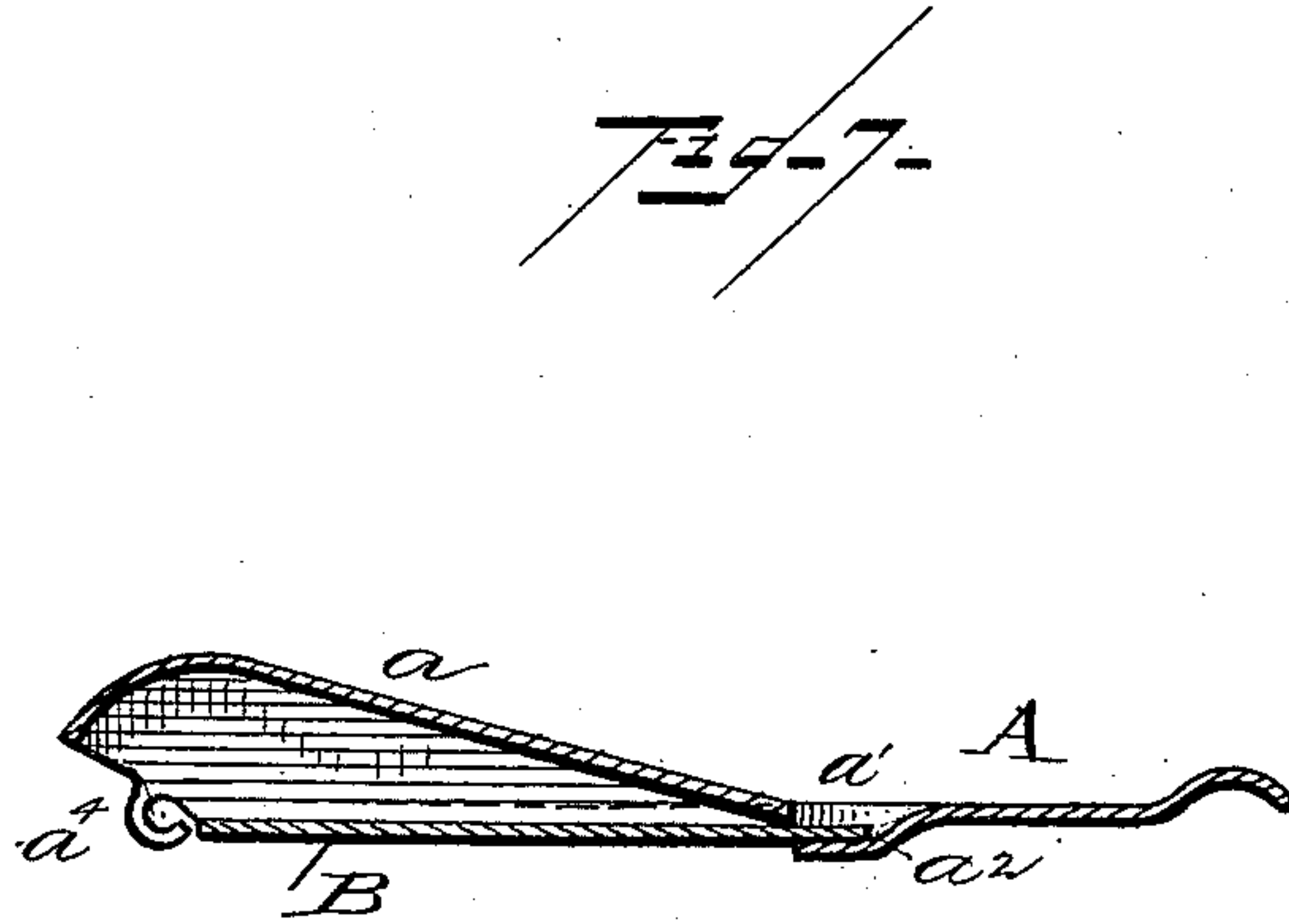
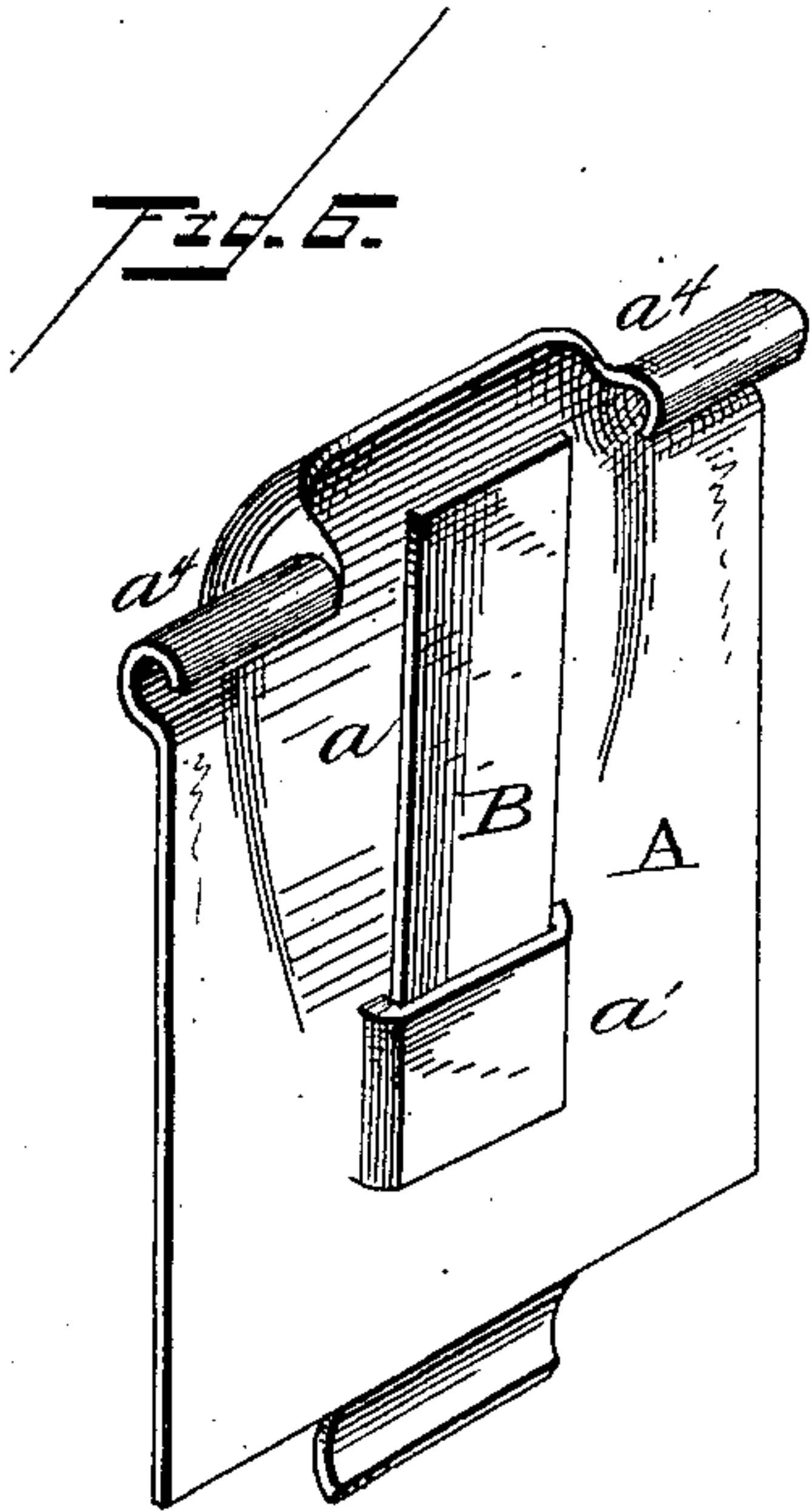
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2 Sheets—Sheet 2.

W. PENNOCK.
CAR AXLE BOX LID.

No. 428,944.

Patented May 27, 1890.



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UNITED STATES PATENT OFFICE.

WILLARD PENNOCK, OF MINERVA, OHIO.

CAR-AXLE-BOX LID.

SPECIFICATION forming part of Letters Patent No. 428,944, dated May 27, 1890.

Application filed May 25, 1888. Serial No. 275,110. (No model.)

To all whom it may concern:

Be it known that I, WILLARD PENNOCK, a citizen of the United States, and a resident of Minerva, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Covers for Journal-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a side elevation of a car-axle box provided with my improved lid or cover. Fig. 2 is a front elevation. Fig. 3 is a vertical sectional view showing the lid raised. Fig. 4 is a similar view showing the lid closed. Fig. 5 is a cross-sectional view. Fig. 6 is a detail view in perspective of the lid or cover, showing the spring properly adjusted. Fig. 7 is a longitudinal vertical sectional view of the same. Fig. 8 is a detail view in perspective of a modified construction of the lid or cover with the spring in proper adjustment, and Fig. 9 is a longitudinal vertical sectional view of the same.

Like letters of reference denote corresponding parts in all the figures.

My invention has relation to sheet-metal covers for car-axle boxes, more especially for railroad-cars; and it has for its object to so construct the same as to prevent the dust from entering the box and settling upon the lubricated parts, and, furthermore, in various other details of construction, as will be hereinafter more fully set forth.

Reference being had to the accompanying two sheets of drawings, the letter A represents a lid or cover of a car-axle box, constructed, preferably, of sheet-steel, pressed or stamped into the form shown in Fig. 5 of the drawings—that is to say, a blank formed with an upper central swell or bulge a and a lower depression a' , said depression terminating in an offset or shoulder a^2 at its lower end and a transverse slot a^3 at its upper end, adapted to receive a spring B, the end of said spring being seated in the depression a' and bearing against the offset or shoulder in the lower end thereof.

The letter C represents a car-axle journal-

box provided with a central perforated lug D, through which a transverse rod E passes, said rod being adapted to receive hinge-connections $a^4 a^4$ upon the upper edges of the lid or cover A, and having its end screw-threaded to receive a locking-nut F, for retaining the rod in its proper position.

When the hinge-connections are properly adjusted upon the transverse rod E, it will be seen that the upper end of the spring B will bear against the central lug D, and the pressure upon the spring will serve to hold the cover securely in place over the opening in the journal-box, and notwithstanding the severe jolting to which the cars are subjected the tension of the spring is sufficient to overcome the tendency which the cover may have to fly open, thus preventing all dirt and dust from being admitted in this way. It will also be observed that by having the spring beneath the cover and protected thereby it is impossible for any dust to enter from the top of the device, and at the same time by providing the cover with the bulge or swell the spring is allowed free play or yielding motion. When it is desired to lift the cover for the purpose of oiling or lubricating the parts, the spring will slide over the central lug D, whereby the opening of the cover is effected with but comparatively little effort.

Not only does my device possess the advantages above set forth, but it also possesses the further advantage of providing a spring which can be readily removed when desired, as if it should become broken or otherwise damaged, it can be replaced by another with little or no trouble, except so far as it is necessary in substituting a spring of the proper length. By the construction of the lid or cover the spring, as heretofore explained, may be adjusted and secured without the employment of any fastening devices whatever, the offset or shoulder a^2 and the pressure upon the spring being sufficient to hold the same securely in position. It will be further seen that my device is a great improvement over the covers or lids which are provided with springs integral therewith, inasmuch as should such springs break the whole device becomes inoperative, whereas in my device, as stated, the spring may readily be replaced by another.

Having thus described my invention, I claim

and desire to secure by Letters Patent of the United States—

1. As a new article of manufacture, the herein-described lid or cover for axle-boxes, 5 consisting of a blank pressed or stamped so as to form an upper central swell or bulge, and a lower transverse slot terminating in a depression; substantially as set forth.

2. As a new article of manufacture, the 10 herein-described lid or cover for car-axle boxes, consisting of a blank pressed or stamped so as to form an upper central swell or bulge, and a lower transverse slot terminating in a depression, said depression provided with an 15 end shoulder or offset, substantially as set forth.

3. The combination, with a lid or cover for car-axle boxes, having upper central swell or bulge and a lower transverse slot terminating 20 in a depression, said depression terminating in

an end shoulder or offset, of a spring adapted to pass through said slot and to bear against said shoulder or offset, substantially as set forth.

4. The combination, with a lid or cover for 25 car-axle boxes, having upper central swell or bulge and a lower transverse slot, said slot terminating in a depression, of a spring provided with a lug or shoulder adapted to bear against the shoulder formed upon the under 30 side of the cover by the lower depression, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

WILLARD PENNOCK.

Witnesses:

C. A. SMITH,

G. G. J. GREENWOOD.