

H. HAMILTON.
COTTON BALE-TIES.

No. 193,946.

Patented Aug. 7, 1877.

fig. 1.

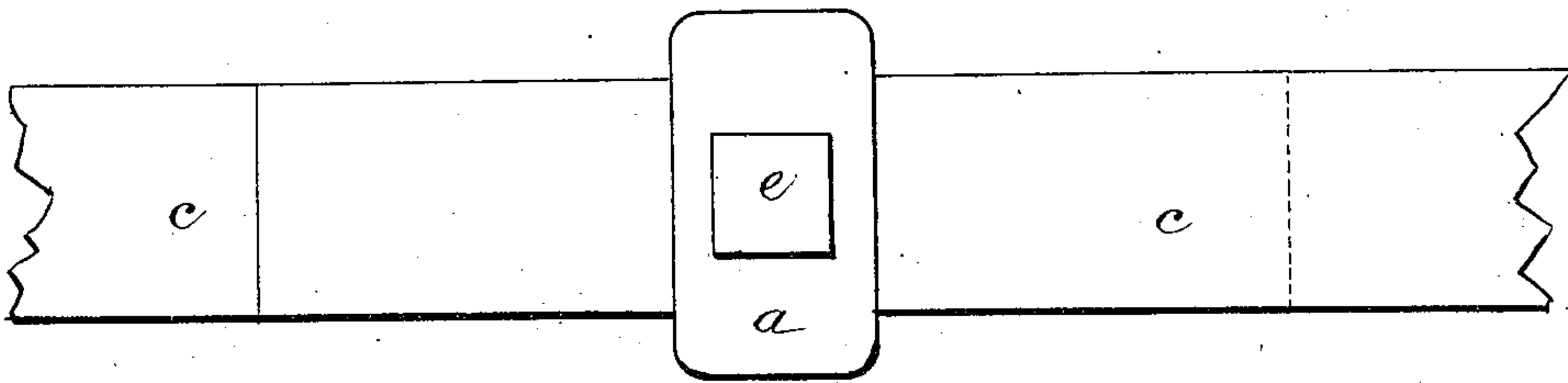


fig. 2.

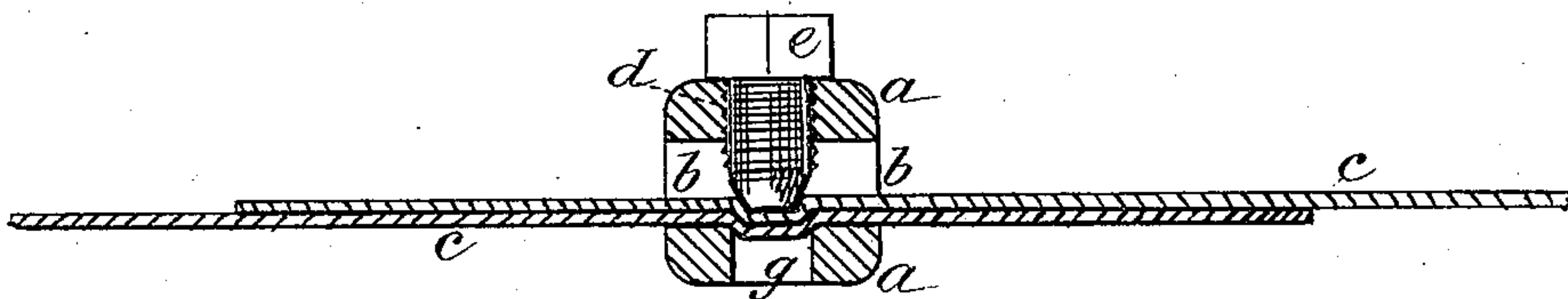


fig. 4.

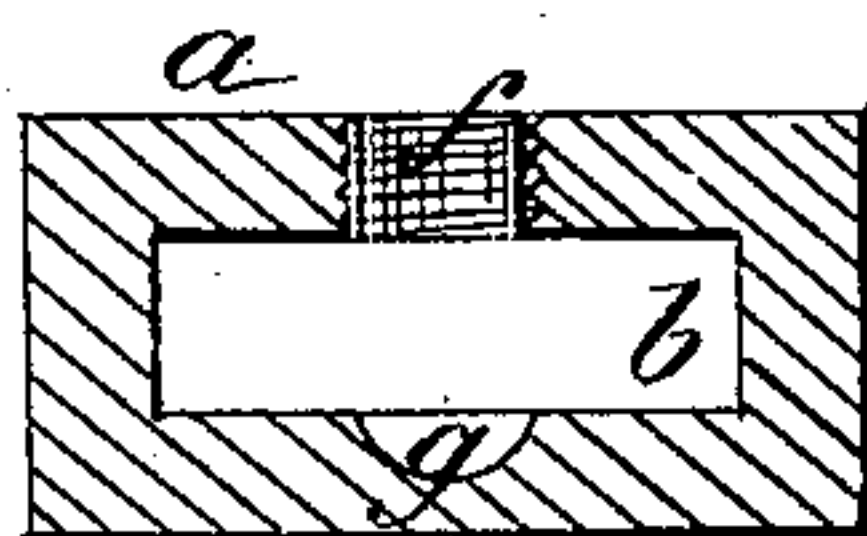


fig. 5.

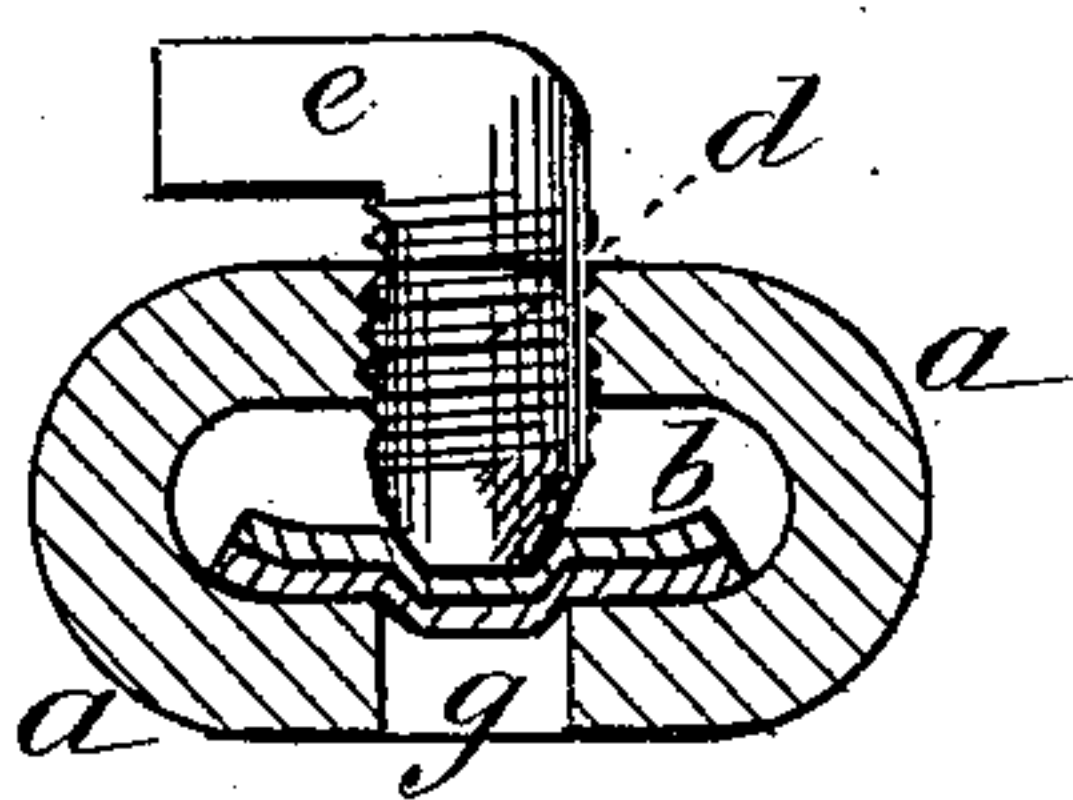


fig. 3.

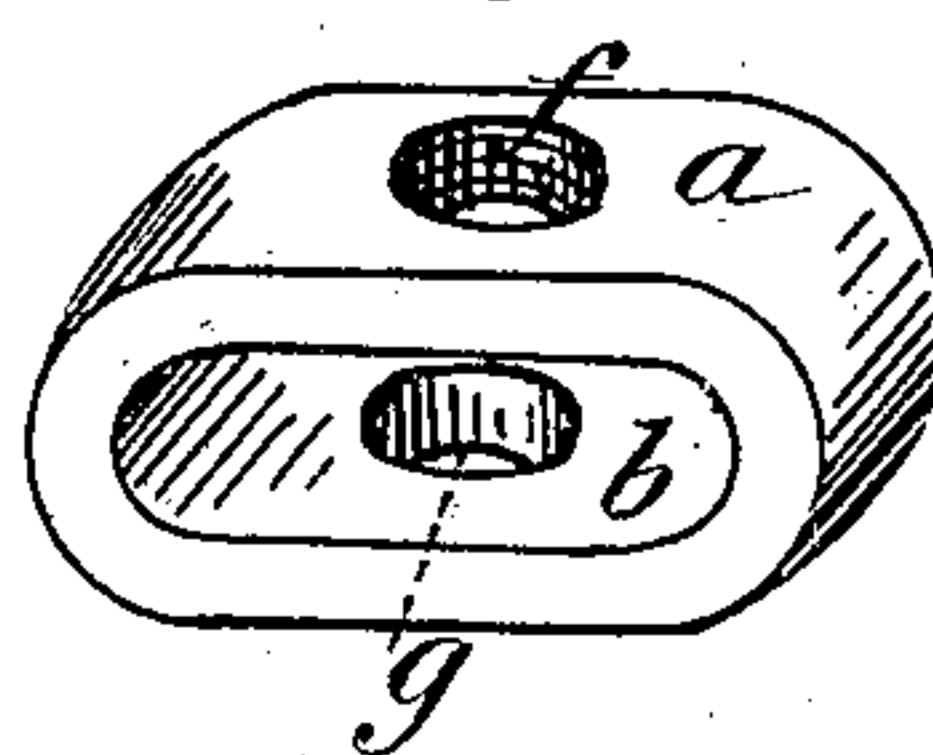
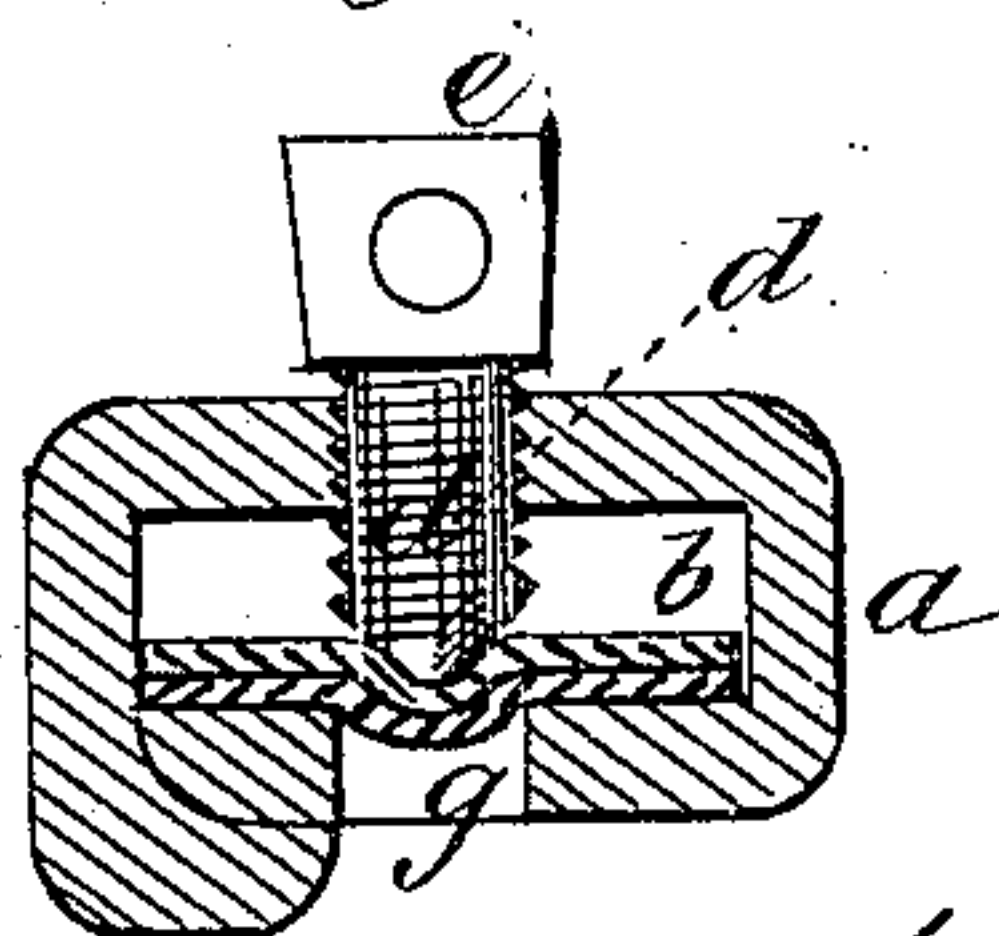


fig. 6.



Witnesses:

West Wagner
Floyd Norris

Inventor:

Homer Hamilton
by Johnson & Johnson
Atty.

UNITED STATES PATENT OFFICE.

HOMER HAMILTON, OF YOUNGSTOWN, OHIO, ASSIGNOR OF ONE-HALF HIS
RIGHT TO WILLIAM L. BUECHNER, OF SAME PLACE.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 193,946, dated August 7, 1877; application filed
July 6, 1877.

To all whom it may concern:

Be it known that I, HOMER HAMILTON, of Youngstown, in the county of Mahoning and State of Ohio, have invented certain new and useful Improvements in Cotton-Bale Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and to letters of reference marked thereon, which form a part of this specification.

I have invented a bale-tie simple, effective, and easily used, consisting of a strap or buckle embracing the lapped ends of a bale-hoop, a screw-threaded opening in one side of said strap, and an opening or cavity coincident in the other side, in combination with a bulging and clamping screw-bolt, whereby the laps are bulged into said opening or cavity, and there clamped upon the inner side of the strap.

The design is that the screw-bolt shall be long enough to give sufficient pressure to force the metal of the lapped hoop ends into said opening or cavity, and thereby lock them together and to the buckle by the acting end of the screw-bolt within the slot of the buckle or strap.

The acting end of the screw-bolt not only makes the bulge or indentation in the lapped hoop ends to force the metal into the opening or cavity, but serves to clamp the lapped ends upon the inner side of the strap or buckle.

A slotted buckle and a screw-bolt entering the slot from one side of the buckle, coincident with an opening or cavity in the other side, completes the device.

Referring to the drawings, Figure 1 shows the lapped portions of a bale-hoop with my new tie applied thereto; Fig. 2, a longitudinal section of the same; Fig. 3, the buckle or strap with its screw-threaded opening; Fig. 4, a section of the same; Fig. 5, a cross-section of the buckle and its bulging-screw as applied; and Fig. 6, a similar section, showing a slightly different form of buckle.

The buckle *a* is of metal, with a slot, *b*, of sufficient opening to receive the lapped ends *c* of the hoop. A stout screw-bolt, *d*, with a head, *e*, to receive a wrench, is fitted in a

screw-threaded opening, *f*, in one side of the buckle, and an opening or cavity, *g*, is made in the other side of the buckle, just opposite the screw-bolt, to receive the metal as it is bulged by said screw-bolt.

The shank of the screw-bolt has strong threads, and is of a length sufficient, when screwed home, to press upon and force the metal of the lapped hoop ends into the opening or cavity of the buckle, and thus securely fasten the ends of the hoop by the coincident bulge or indentations of the hoop-laps entering said opening or cavity, and held therein by the screw-bolt, the end of which follows the bulge, and clamps the lapped hoop ends firmly against the inner side of the buckle, so that neither end of the hoop can be drawn out while the screw remains clamped hard by screwing it in.

Any suitable form and construction of buckle will answer so long as it has the forcing screw-bolt on one side and the receiving opening or cavity on the other side, with an intervening oblong slot to receive the hoop ends.

The acting end of the screw-bolt is made tapering or of truncated conical form, for the purpose of more readily bulging the metal and following it into the locking-opening of the buckle.

In applying the fastening, the hoop ends are inserted into the slot from opposite ends, and when adjusted with the requisite slack the screw-bolt is driven home upon the lapped ends and bulged with the metal into the buckle opening or cavity by a wrench.

By unscrewing the bolt, all the hoops of a bale may be easily and quickly removed and the fastenings preserved.

The screw-bolt head may be made with an opening to receive a rod by which to turn it, as shown in Fig. 6; or it may be formed by a side bend to receive a socket-wrench, as shown in Fig. 5.

I claim—

1. A strap or buckle embracing the ends of a bale-hoop, a screw-threaded opening in one side thereof, and an opening or cavity coincident in the other side, in combination with a bulging and clamping screw-bolt, thereby co-

incident portions of the laps are bulged into said opening or cavity, and there clamped to one side of the strap.

2. A buckle for cotton-bale ties, a screw-threaded opening in one side, a coincident opening or cavity in the other side, and an intervening slot adapted to receive a screw-bolt, for the purpose described.

3. The combination, with a buckle-tie, having a screw-threaded opening on one side, a coincident opening or cavity on the other side,

and an intervening slot of a screw-bolt, having a tapering or truncated point, for the purpose stated.

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

HOMER HAMILTON.

Witnesses:

JOHN M. EDWARDS,
W. M. OSBORN.