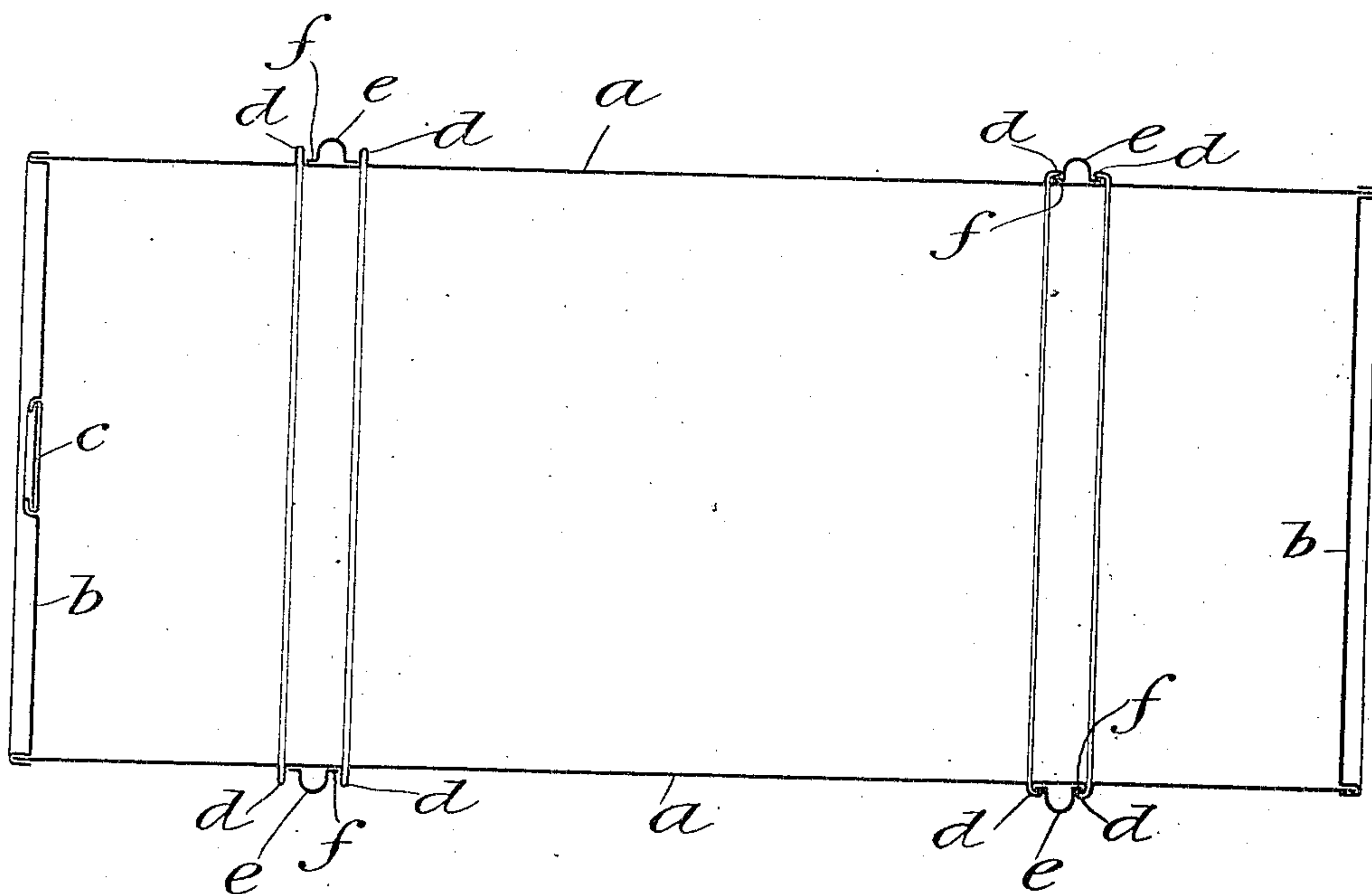


No. 837,476.

PATENTED DEC. 4, 1906.

H. A. KEINER.
METALLIC BARREL.
APPLICATION FILED DEC. 21, 1905.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY A. KEINER, OF NEW YORK, N. Y.

METALLIC BARREL.

No. 837,476.

Specification of Letters Patent.

Patented Dec. 4, 1906.

Application filed December 21, 1905. Serial No. 292,702.

To all whom it may concern:

Be it known that I, HENRY A. KEINER, a citizen of the United States, and a resident in the borough of Brooklyn, county of Kings, city and State of New York, have invented a new and useful Improvement in Metallic Barrels, Drums, and Similar Receptacles, of which the following is a specification.

The invention is illustrated in longitudinal sectional view.

As metallic barrels, drums, and similar receptacles have heretofore been made, a difficulty has been experienced in properly hooping them, in that, since the hoops and receptacles are both of metal, riveting of the former to the latter has been the only method practiced, and since these receptacles are usually heavy and the contents heavy and costly the blows received by the hoops are apt to loosen the rivets, occasioning injury to the contents and to the receptacles themselves.

My invention relates, therefore, to improvements in the construction of drums or barrels whereby the hoops or strengthening-bands will be most effectively held in position without the employment of any rivets whatever and without forming any holes, seams, or openings of any kind whatsoever in the structure of the barrel or drum.

In the drawing hereof, *a* represents the cylindrical or body part of the receptacle.

b b are two heads. The head at the left shows at *c* another improvement which I have made in these structures, which, however, will not be herein described, since it will form the subject-matter of another application for Letters Patent.

The hoops are constructed and attached to the cylindrical or substantially cylindrical part of the structure as follows: *d d* are annular ribs which extend circumferentially around the structure. I prefer that these ribs should be continuous; but they may be broken, if preferred. *e* represents the hoops, which may be made of sheet metal suitably rolled or drawn into substantially the form of the letter *U*, having strong laterally-extending flanges *ff*. The annular ribs *d d*, as shown at the left in the drawing, are in the first instance rolled or otherwise formed in the metal composing the drum in such man-

ner that they project at substantially right angles therefrom. Thereupon the hoop *e* is wrapped about the body part of the receptacle between these ribs, and when snugly in place its ends are preferably fastened together in some suitable manner, as by riveting or welding, which will not, however, always be necessary, because since the ribs will be forcibly swaged down upon the flanges *ff* of the hoop it will be rigidly held and no other confining means will be required. It is, however, sometimes a convenience during the process of manufacture, as well as desirable in the finished structure, to have the ends of the hoops riveted or otherwise fastened together. After the hoop is in place about the body of the receptacle, between the ribs, as stated, then by the operation of suitable mechanism the ribs are rolled down into forcible and preferably clamping contact with the flanges *ff* of the hoop, as shown at the right hand in the drawing, whereby the hoop will be rigidly and permanently held in place.

It will be noted that under my invention the barrel or drum has no seams, openings, punctures, or breaks therein whatever and that the hoops are held in proper relation to the body of the receptacle in a most rigid, substantial, and permanent fashion and, furthermore, that they are protected against shocks and blows by the overlapping parts of the ribs formed from the body of the receptacle itself. Thus not only is the structure strengthened by the hoop, but also by the corrugated metal composing the ribs, and incidentally the appearance of the receptacle is materially improved.

In the drawing I show two hoops only as applied to a truly cylindrical drum. This is for the sake of simplicity and clearness therein. Obviously the number of hoops and their location upon the drum or barrel, as well as the special shape of the latter, is immaterial.

I claim—

1. A metallic barrel or drum having circumferential ribs integral with the metal of the barrel itself and a metallic hoop confined between said ribs by the superposition of the latter upon the edges of the hoop.

2. A metallic barrel or drum having circumferential ribs integral with the metal of the barrel itself and a metallic hoop made from sheet metal bent into U shape and provided with lateral flanges, confined between said ribs by the superposition of the latter upon the flanges of the hoop.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY A. KEINER.

Witnesses:

F. U. DONSBACH,
SAMUEL STERN.