

J. S. BARDEN.

Couplings for Pump-Barrels, &c.

No. 147,545.

Patented Feb. 17, 1874.

Fig. 1

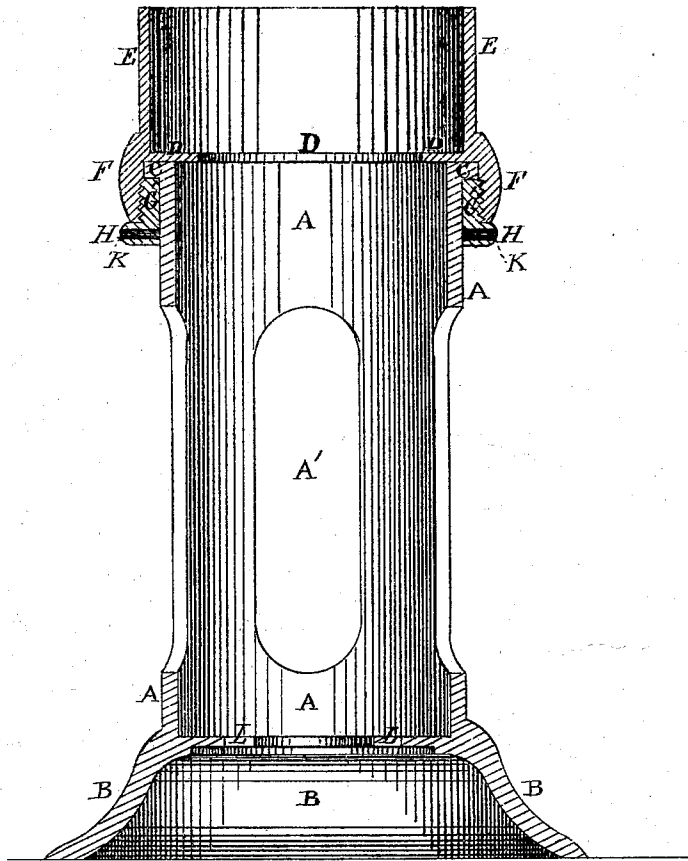
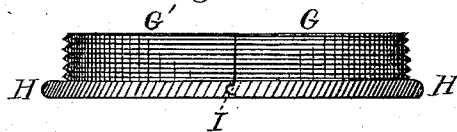


Fig. 2



Witnesses

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JOHN S. BARDEN, OF PROVIDENCE, RHODE ISLAND.

IMPROVEMENT IN COUPLINGS FOR PUMP-BARRELS, &c.

Specification forming part of Letters Patent No. **147,545**, dated February 17, 1874; application filed October 6, 1873.

To all whom it may concern:

Be it known that I, JOHN S. BARDEN, of Providence, in the county of Providence and State of Rhode Island, have invented certain Improvements in Pump-Barrels, of which the following is a specification:

Figure 1 of the accompanying drawing is a central vertical section of my improved pump-barrel. Fig. 2 is an elevation of the exterior of a coupling used in connecting the two sections of a pump barrel or cylinder.

The present invention relates to certain new and useful improvements in pump barrels or cylinders, having for their principal object the providing an economical and convenient method of connecting the upper and lower sections of the barrel or cylinder. My invention consists, mainly, in a pump-barrel, or other cylinder or tube, formed in two sections, one of which is formed on the interior of its lower portion with screw-threads, which mesh with outer screw-threads of a screw-ring or coupling formed in two semi-annular sections, thus arranged, to be readily applied to the other section of the barrel or cylinder, &c., which is readily attached to the former section by merely screwing the latter over the coupling, which is formed with a bottom external lip or shoulder to receive it, instead of forming and connecting the upper and lower sections of the barrel in the more expensive and less convenient manner heretofore in use.

In the drawing, A represents the lower section of a pump-barrel, formed by a vertical cylinder, having vertical openings A' formed in its circumference to lighten its weight, and formed at the bottom with a curved base, B, and at the top with an exterior shoulder, C, which forms a seat for a flange, D, formed on the interior lower portion of the upper section E of the barrel, which section consists of a cylindrical shell or tube, having its exterior lower portion formed with a projecting band, F, formed on the interior with screw-threads. Arranged to fit around the upper portion of the lower section A, just below its shoulder C, is an annular screw-coupling formed in two semi-annular sections, G G', having exterior screw-threads with which mesh the screw-threads of the upper section E, which screws down over the top of the lower section A and the coupling G G' which is formed with a bottom lip or shoulder, H, to form a seat for the upper section E; or the coupling may be ar-

ranged to find a seat on the tops of vertical ribs arranged on each side of the periphery of the lower section. The ends of one section, G, of the coupling are formed with transverse tongues I, that fit into transverse grooves K, formed in the opposite ends of the other section, G', and provided with suitable packing to prevent leakage, and to hold fast the ends of the two sections of the coupling. The section A is formed on the interior, near its bottom, with a suitable valve-seat, L.

Heretofore pump-barrels have been formed with exterior flanges projecting from the top of the lower section and from the bottom of the upper section of the barrel, or from the ends of tubes, pipes, &c. These flanges were formed with screw-holes and joined together by the insertion of screw-bolts held by screw-nuts and washers, which arrangement was expensive in construction and inconvenient in use, requiring much time and labor in adjusting or removing the bolts, particularly in the latter case when the bolts had become rusty.

It will readily be seen by the above description of my improved barrel, reference being had to the drawings, that the different portions of the barrel or tube, &c., may be readily and cheaply cast, and by applying the coupling to the upper part of the lower section, which is easily done without the use of any tool, the upper section is, without trouble, screwed down over it, and the two sections are securely united without the expenditure of much time or labor.

It is evident that my improved coupling arrangement is equally applicable to any cylinders other than pump-barrels.

Having thus fully described my improvements, what I claim as my invention, and desire to have secured to me by Letters Patent, is—

The coupling-ring G, formed in two sections and having its periphery threaded, in combination with the sections A E, or their equivalents, having the flanges C D, and band F, substantially as described, for the purpose specified.

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

JOHN S. BARDEN.

Witnesses:

CARROLL D. WRIGHT,
SAML. M. BARTON.