

(No Model.)

2 Sheets—Sheet 1.

A. J. ROBINSON.
STOVE PIPE COUPLING.

No. 411,130.

Patented Sept. 17, 1889.

Fig. 1.

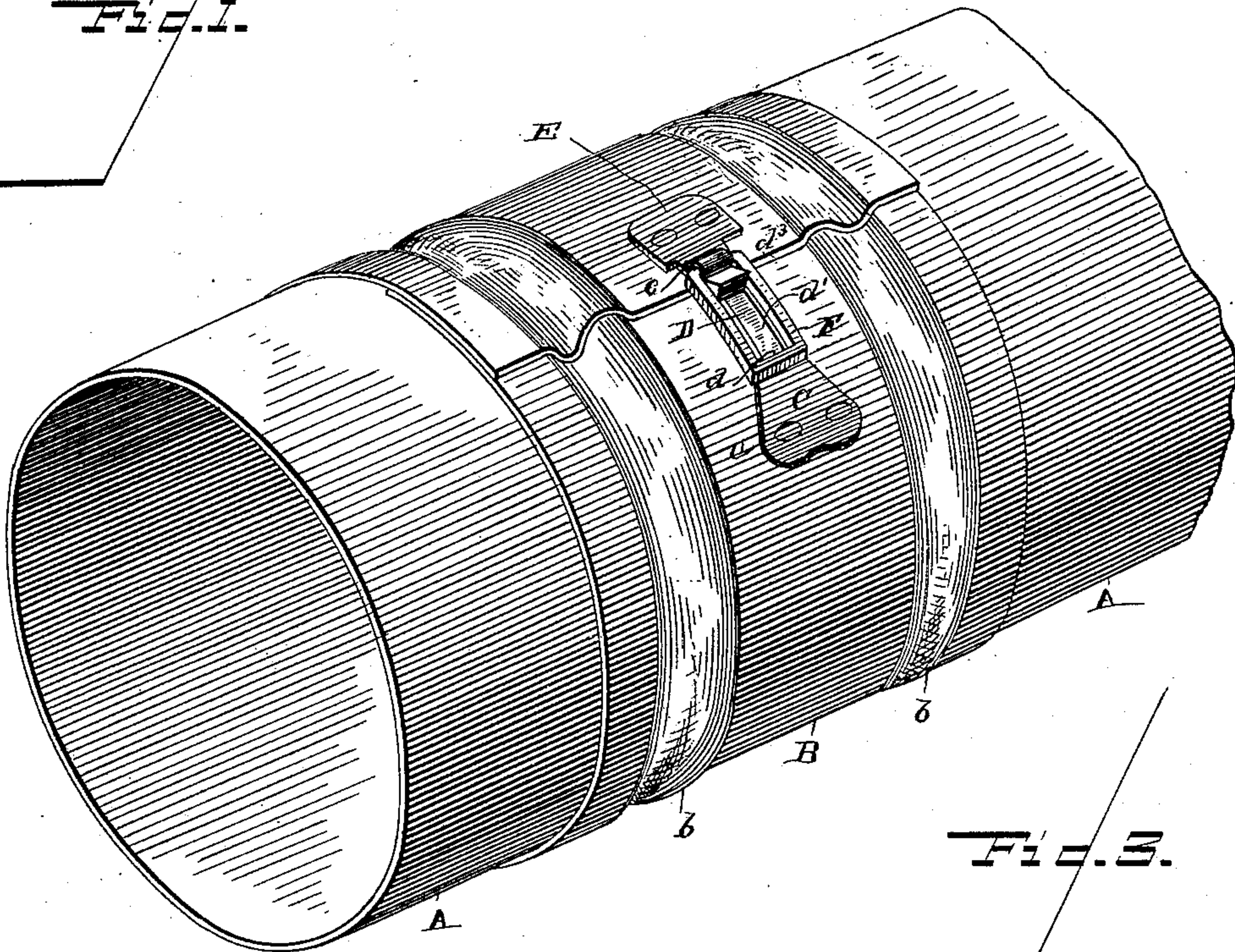
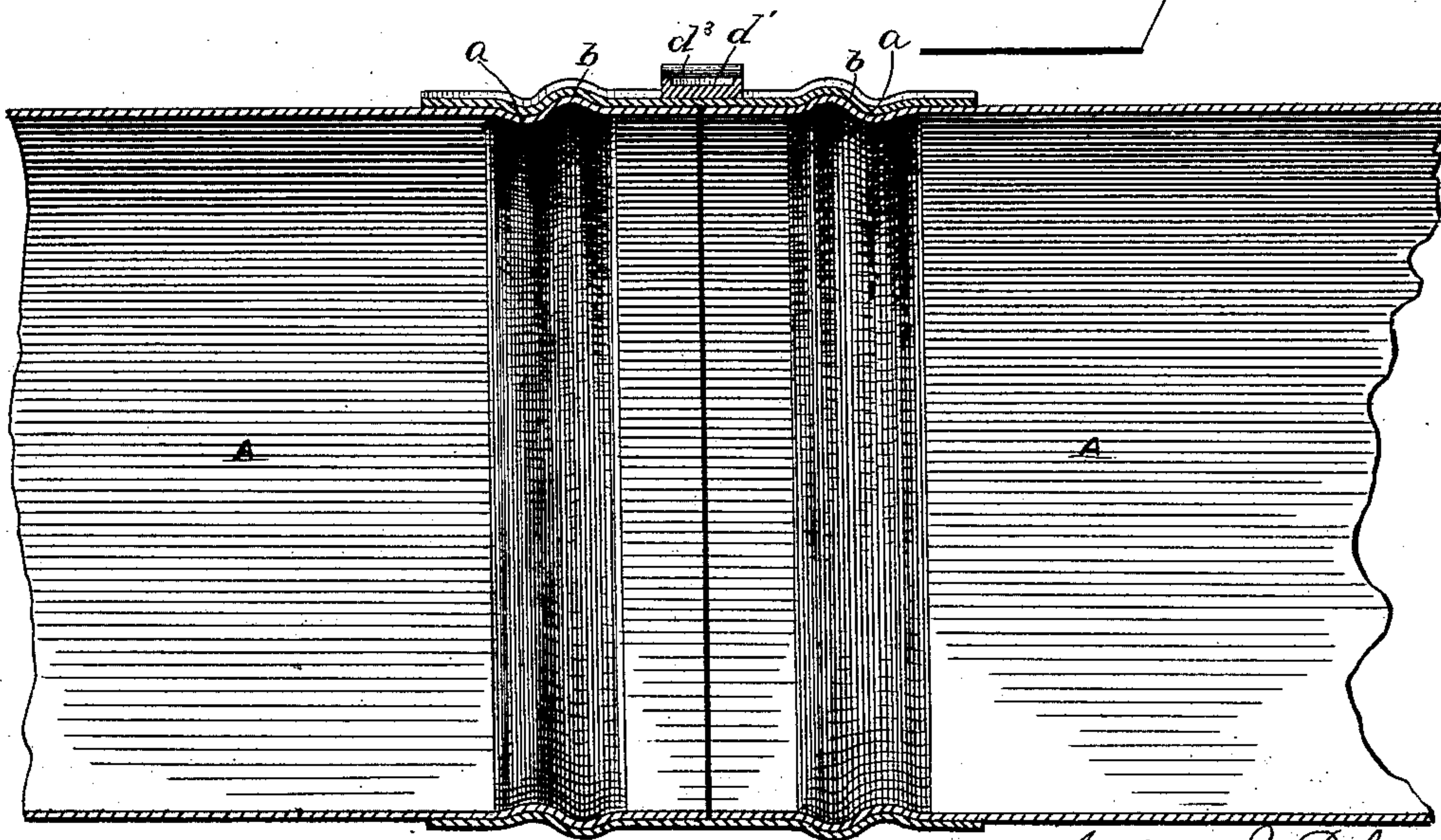


Fig. 2.



WITNESSES

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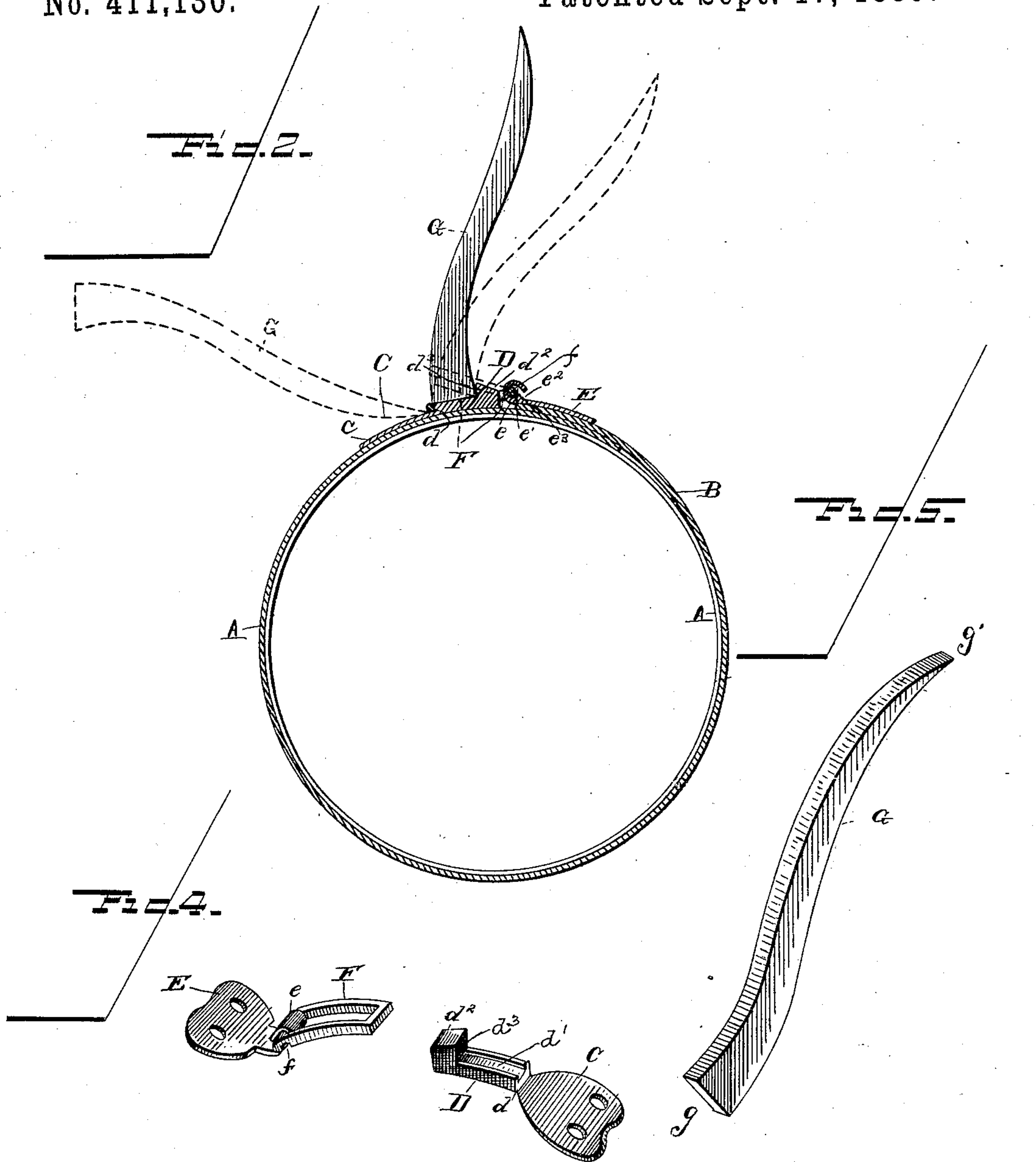
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2 Sheets—Sheet 2.

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WITNESSES

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UNITED STATES PATENT OFFICE.

ANDREW JAMES ROBINSON, OF BATHGATE, DAKOTA TERRITORY.

STOVE-PIPE COUPLING.

SPECIFICATION forming part of Letters Patent No. 411,130, dated September 17, 1889.

Application filed March 19, 1889. Serial No. 303,857. (No model.)

To all whom it may concern:

Be it known that I, ANDREW JAMES ROBINSON, of Bathgate, in the county of Pembina and Territory of Dakota, have invented certain new and useful Improvements in Stove-Pipe Couplings, of which the following is a specification.

This invention relates to stove-pipe couplings, and has special relation to the retaining device therefor and locking-lever.

The object of the invention is to provide a simple and improved coupling of this class adapted to be drawn tightly around the pipe ends and securely locked against displacement.

In the drawings, Figure 1. is a perspective view showing my improved coupling in connection with the adjoining ends of two sections of pipe. Fig. 2 is a transverse sectional view illustrating the manner of securing and removing the coupling. Fig. 3 is a longitudinal sectional view. Fig. 4 is a detail perspective view of the retaining device detached. Fig. 5 is a detail perspective view of a preferred form of locking-lever.

Corresponding parts in all the figures are denoted by the same letters of reference.

Referring to the drawings, A A designate the pipe ends, which are provided with peripheral corrugations *a a* near their edges.

B designates the coupling-band, provided with longitudinal corrugations *b b*, arranged longitudinally with relation thereto and at or near its side edges. These latter corrugations, when the coupling-band is applied, engage the corrugations upon the pipe ends and serve to hold the sections of pipe against longitudinal displacement.

To the coupling-band is centrally secured a rigid plate C, disposed longitudinally with relation to the band. This plate is preferably of cast metal and comprises a broad flattened securing portion *c*, secured to the band by rivets or otherwise, from which projects in the direction of the opposite end of the band an arm D, said plate being curved upon its inner surface to adapt it to conform to the periphery of the band when the latter is applied. The arm D is of greater thickness than the securing portion, thus forming a shoulder *d* at the point of junction of the latter and

said arm. The body of this arm is provided upon its outer face with a central longitudinal groove *d'*, the purpose of which will be hereinafter set forth. The outer end *d²* of the arm is of still greater thickness than the body, forming a second shoulder *d³*, located at the outer end of the groove *d'*.

Centrally upon the other end of the coupling-band is secured a flat plate E, from which projects toward the plate C a narrowed unsecured portion *e*. The latter is bent to form at the outer end an eye *e'*, open at its rear edge, as shown at *e²*, and provided with an upwardly-projecting longitudinal rib *e³*. This eye forms the bearing for a removable link F, the end *f* of the latter being elliptical in cross-section, so that when turned to a proper position it can be slipped between the rib *e³* and edge of portion *e*, and turned down behind said rib. The plate E and link are curved to conform to the periphery of the coupling-band. The link is rectangular in shape, and the opening therein is of sufficient size to receive the arm of the plate C.

For drawing the coupling tightly upon the pipe ends and locking the same, and for also removing it, I employ a lever of any suitable construction, but preferably that herein shown. This lever G describes in outline an approximately compound curve, the straight sides of which converge at one end, while the concave side at this end diverges, forming an end portion *g*, of greater width but less thickness than the central portion of the lever. By this construction the corner formed by the concave side and the end approximates an acute angle, while the corner formed by said end and concave side approximates an obtuse angle. The curved sides converge at the other end of the lever, forming a sharp edge *g'*.

The operation and advantages of my invention will be readily understood by those skilled in the art to which it appertains. After the coupling-band has been placed around the pipe the flat end of the lever is passed through the link from the outside and its sharp or acute edge placed in engagement with the shoulder *d³*. The lever is then drawn in the direction to tighten the band (lapping the end of the latter, carrying the link over the other

end) until its flat end rests in the groove of the plate C, when said end projects slightly beyond the inner end of the groove. When the lever is in this position, the convex side, 5 with which the free end of the link is in engagement, forms an inclined plane, from which the link readily slides to a position behind the shoulder d , thus securely and tightly locking the band when the lever is removed. To 10 remove the coupling, the sharp end of the lever is inserted under the end of the link behind the shoulder d and the link pried up until freed, when the band can be readily removed.

15 My improved coupling is specially effective for coupling the sections of long pipes, such as used in halls and large buildings. By the use of the coupling the joints of such pipes

are rendered strong and rigid, thus dispensing with the suspending-wires usually employed. 20

I claim as my invention—

The herein-described pipe-coupling, comprising the band, a plate C, rigidly secured near one end thereof, having an arm D, provided 25 with the shoulders d and d^3 and groove d' , for the purpose set forth, and a link pivotally secured to the other end of the band and adapted to receive said arm, substantially as set forth.

In testimony whereof I affix my signature in 30 presence of two witnesses.

ANDREW JAMES ROBINSON.

Witnesses:

J. H. COPELAND,

WILLIAM FOSTER.