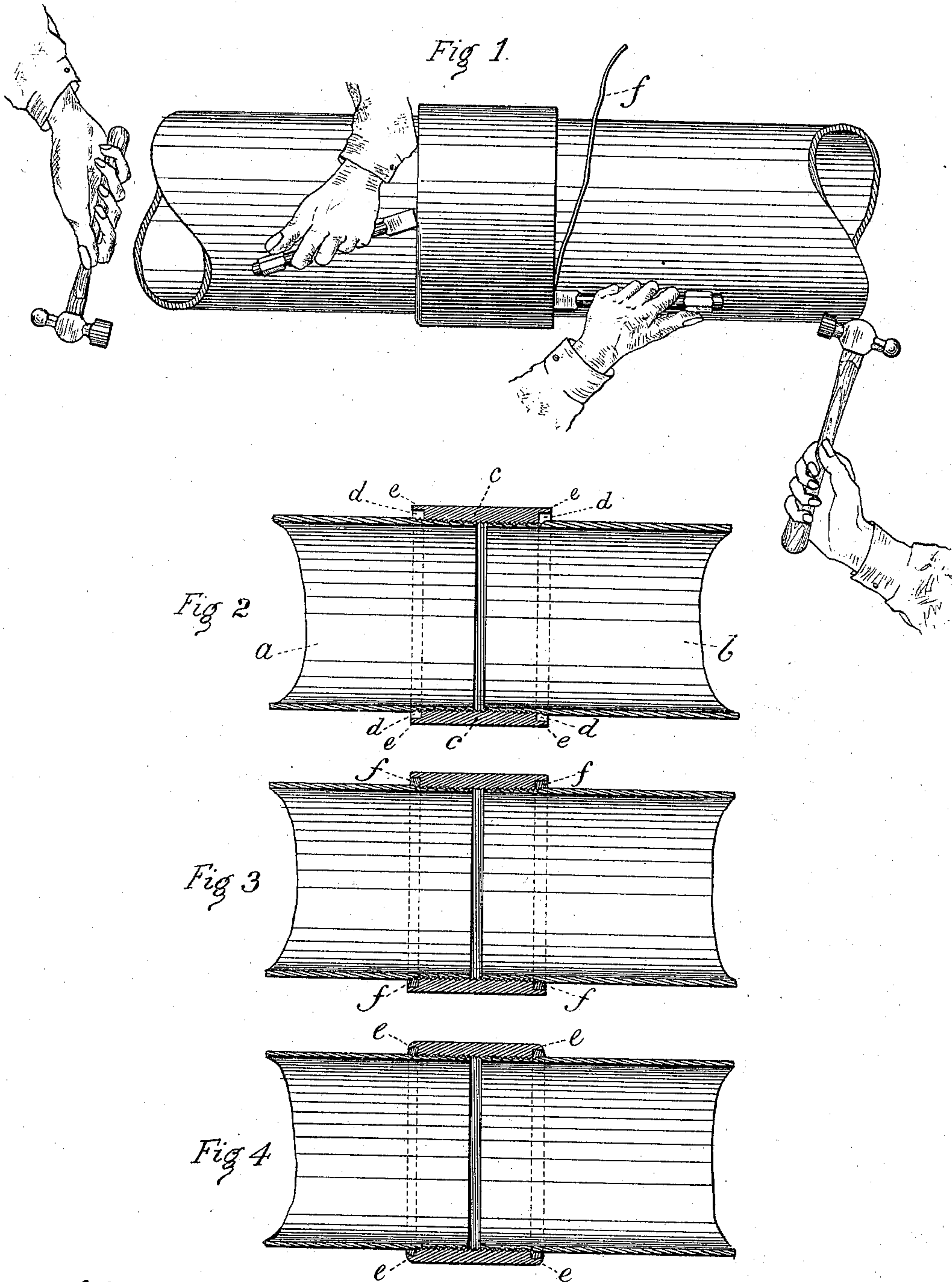


(No Model.)

J. S. SMITH.
PIPE COUPLING, &c.

No. 598,395.

Patented Feb. 1, 1898.



Witnesses:
Chas. E. Spack

J. H. Anderson.

Inventor:
Jacob S. Smith
by Geo. F. Orin

UNITED STATES PATENT OFFICE.

JACOB S. SMITH, OF CHICAGO, ILLINOIS.

PIPE-COUPLING, &c.

SPECIFICATION forming part of Letters Patent No. 598,395, dated February 1, 1898.

Application filed July 26, 1897. Serial No. 645,962. (No model.)

To all whom it may concern:

Be it known that I, JACOB S. SMITH, a citizen of the United States, residing at the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Pipe-Coupling and Means for Sealing the Same, of which the following is a specification.

My invention relates to a peculiar construction of the coupling and a combination, with the coupling, of means for sealing the joint between the coupling and the pipe, the object being to prevent leakage.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is the coupling with two sections of pipe in elevation and mode of sealing. Fig. 2 is a longitudinal cross-section of same with annular recesses clear. Fig. 3 is a longitudinal cross-section of same with annular recesses calked. Fig. 4 is a longitudinal cross-section of same with annular recesses calked and the wall of the recesses collapsed upon the pipe.

In detail, *a* and *b* are the ends of two sections of pipe.

c is the coupling, which is provided at each end with annular recesses *d d*. The material in the coupling is such that the shoulders *e e* are readily collapsible, as shown in Fig. 4.

f is a soft metallic wire which is tamped into the recesses *d* with ordinary calking-tools, as shown in Fig. 1, after which the shoulders *e e* may, when desirable, be collapsed upon the wire *f f*, as shown in Fig. 4.

No particular kind of material is required in the coupling and wire, except that it must be sufficiently pliable to be adapted for the uses above specified. Lead in any form may be advantageously used in lieu of the wire, but I prefer a soft metallic wire, as above stated.

The degree of tamping applied to the metallic wire in the recesses is governed by the degree of pressure in the pipes, from which it is obvious that if the pressure in the pipes is low the tamping need not be so thorough as where there is a high pressure. The peculiar usefulness to be attributed to the collapsibility of the shoulders *e e* is to further tamp and hold in place the wire *d* or other suitable material, as above indicated, so that upon the discovery of a leak in the joint it is only necessary to tamp the outer surface of the coupling at the defective point, thus obtaining a concentrically positive pressure as distinguished from the pressure obtained by a tamping applied immediately to the metal in a longitudinal direction.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a pipe-coupling provided with an annular recess at each end, of a soft metal adapted to be tamped into said recesses, the material in the ends of said coupling being adapted to be collapsed upon said metal after the same has been tamped into said recesses, to further tamp and hold said metal in place, substantially as described.

2. The coupling *c* provided with the annular recesses *d d* in combination with the soft metallic wire *f* when tamped into said recesses and the shoulders *e e* when collapsed upon said wire after the same has been tamped into place, substantially as described.

Witness my hand this 20th day of July, A. D. 1897.

JACOB S. SMITH.

Witnesses:

C. H. TOBIAS,
H. E. GREENE.