

No. 876,606.

PATENTED JAN. 14, 1908.

M. SULLIVAN.
PIPE COVERING.

APPLICATION FILED JULY 25, 1907.

Fig. 2.

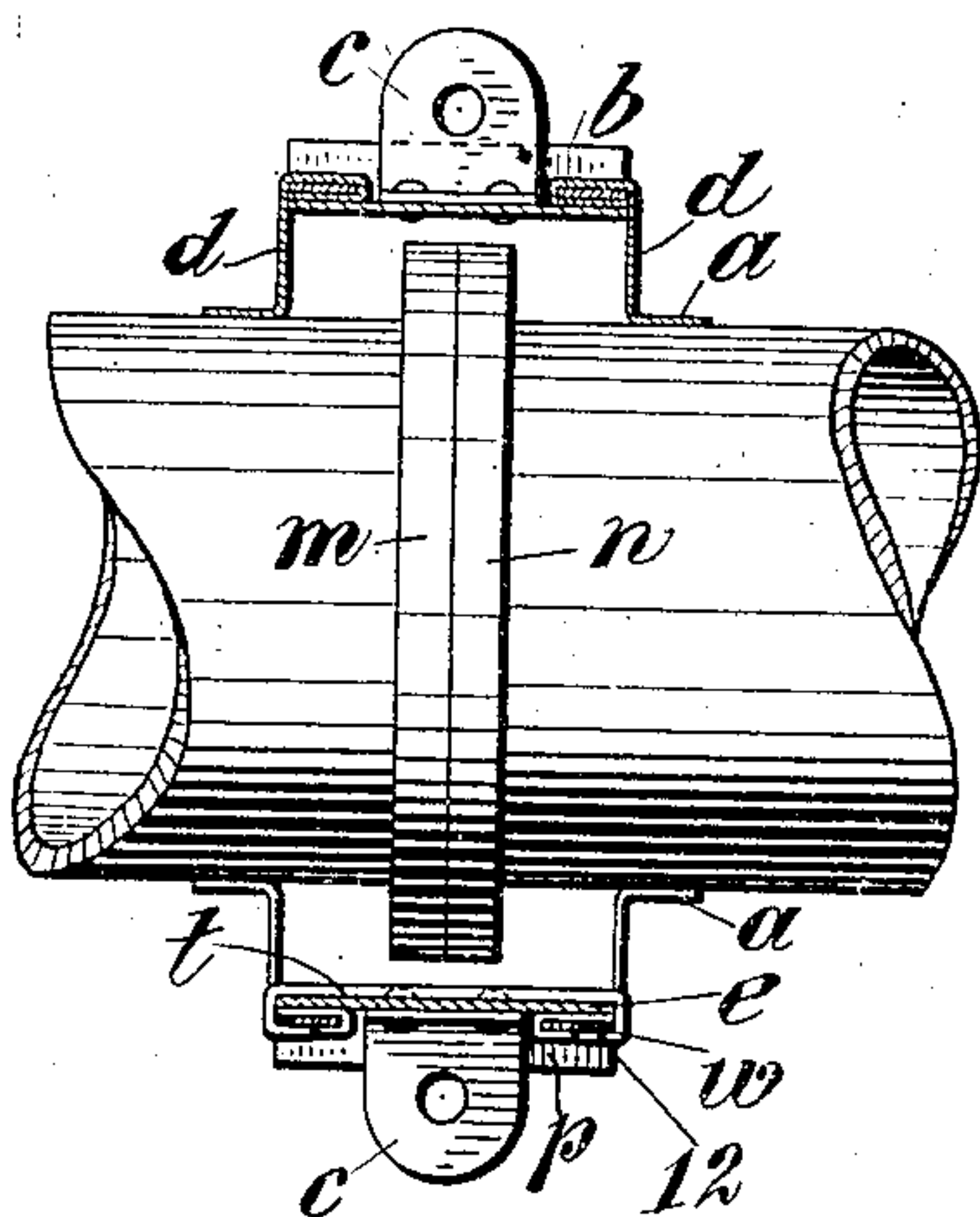


Fig. 3.

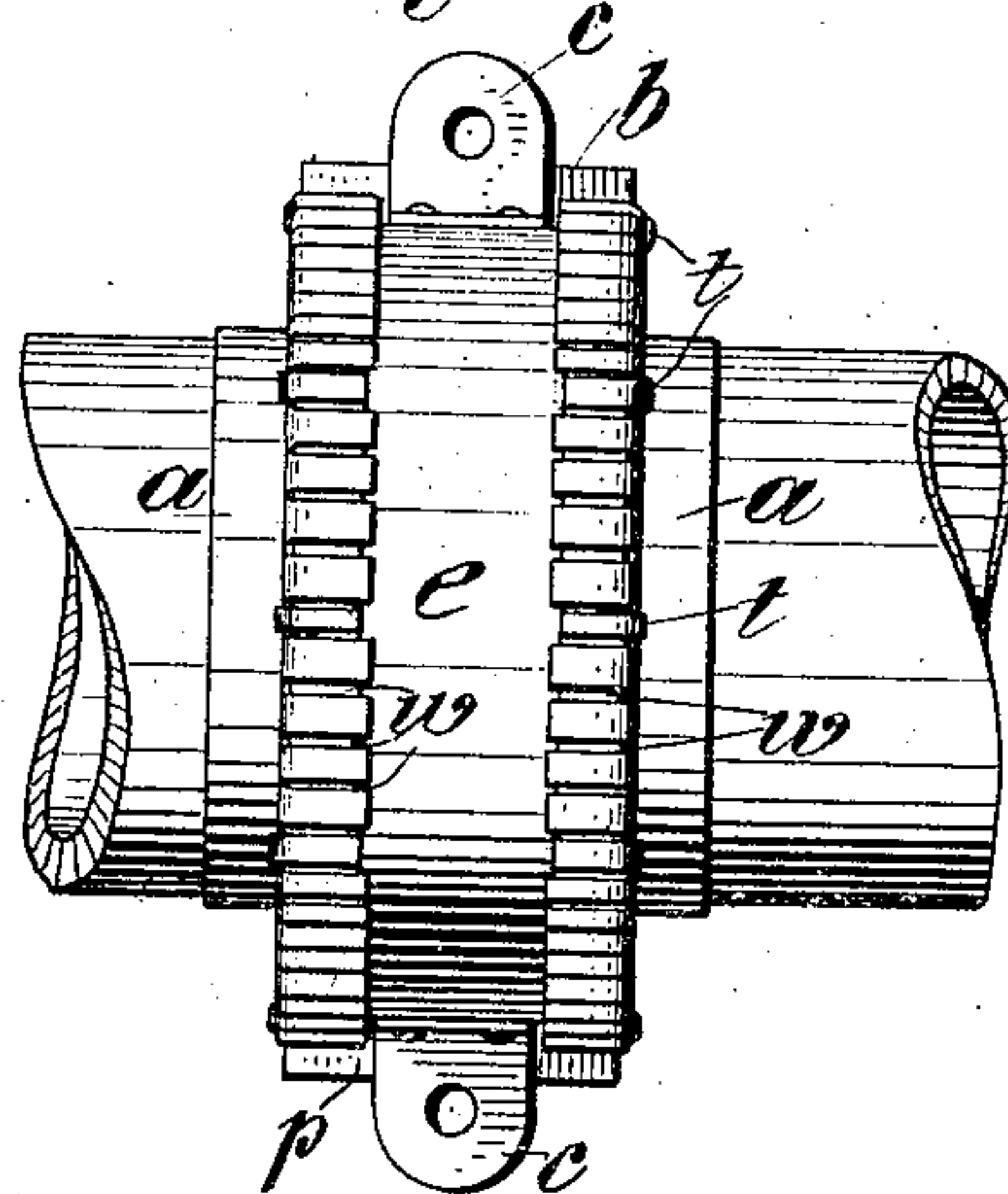


Fig. 4.

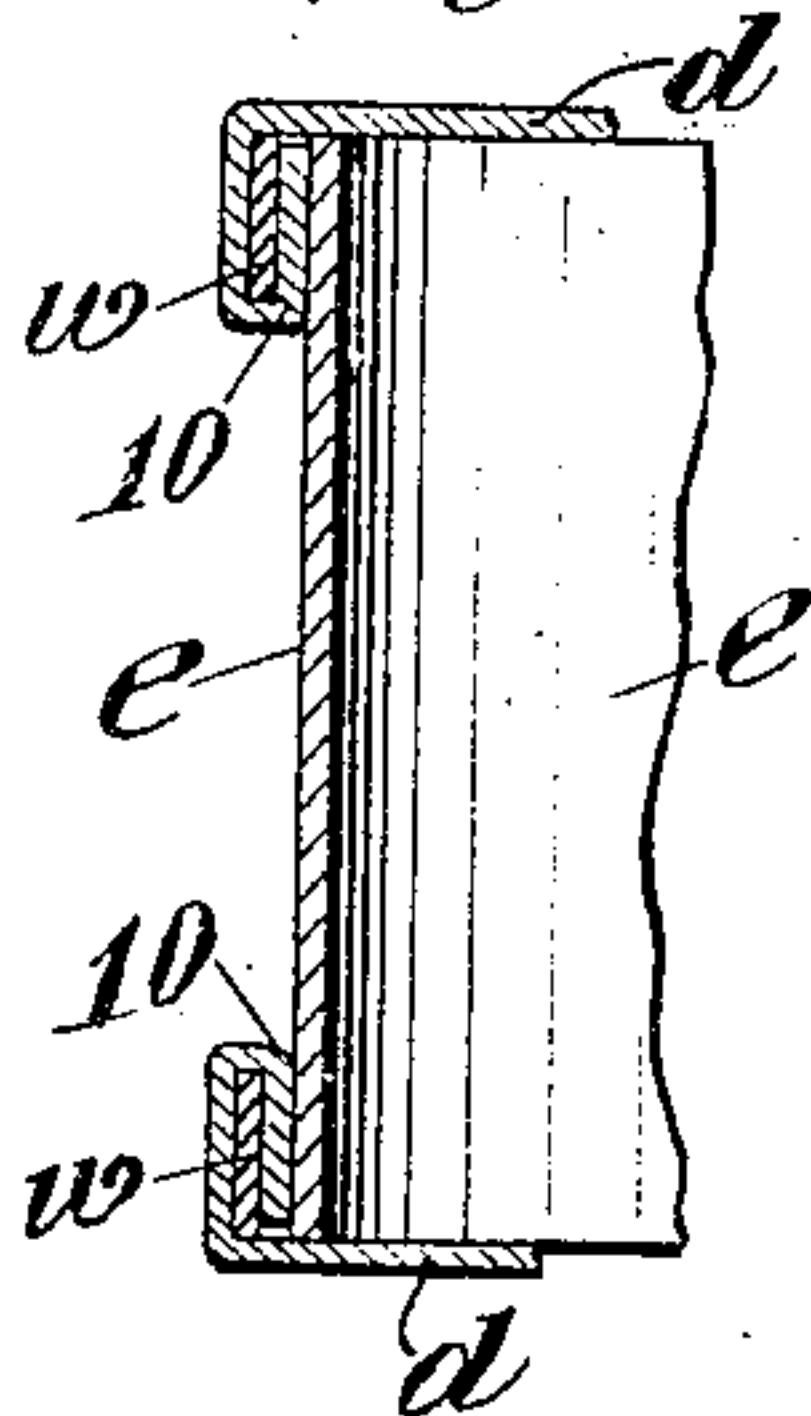


Fig. 1.

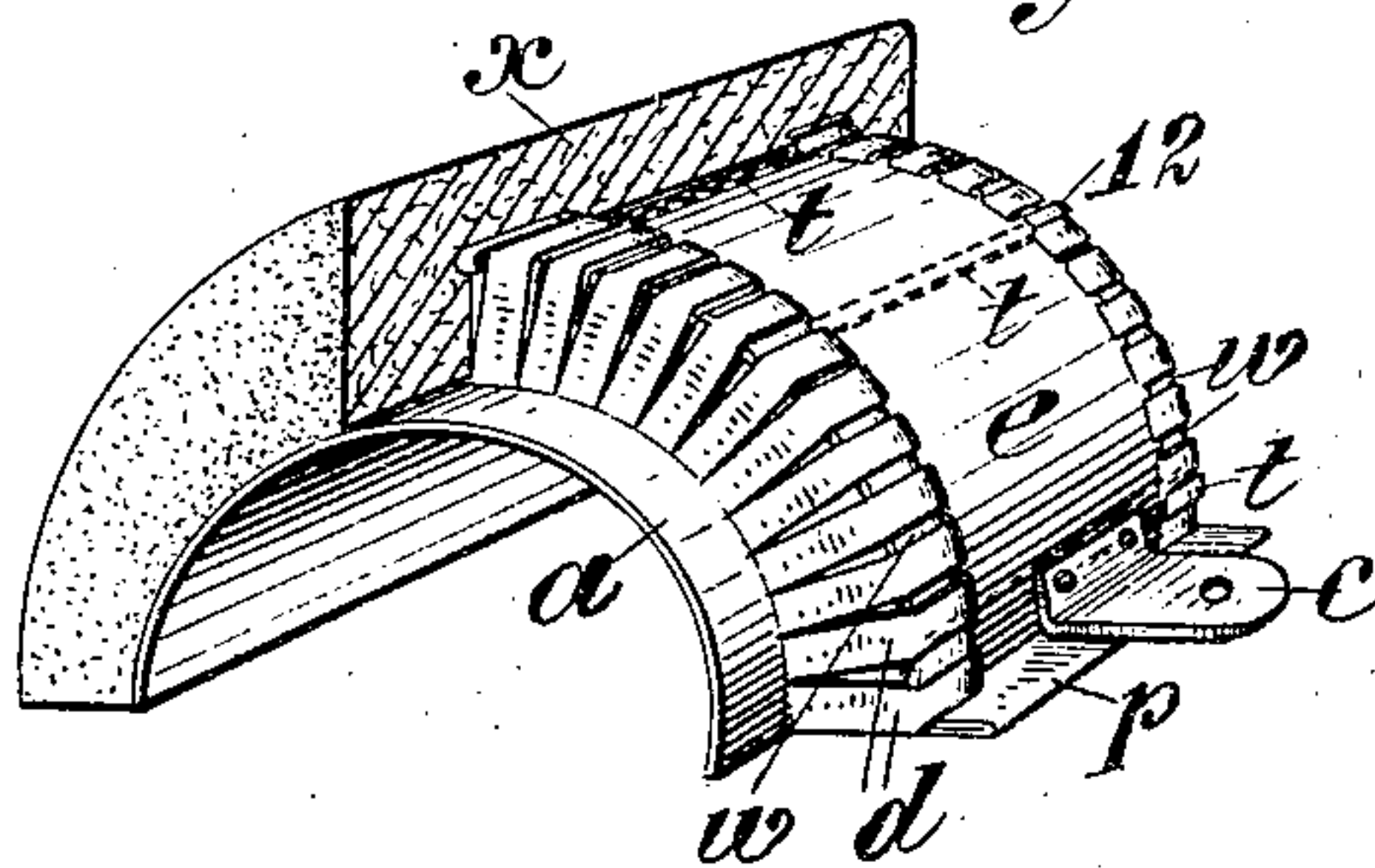


Fig. 5.

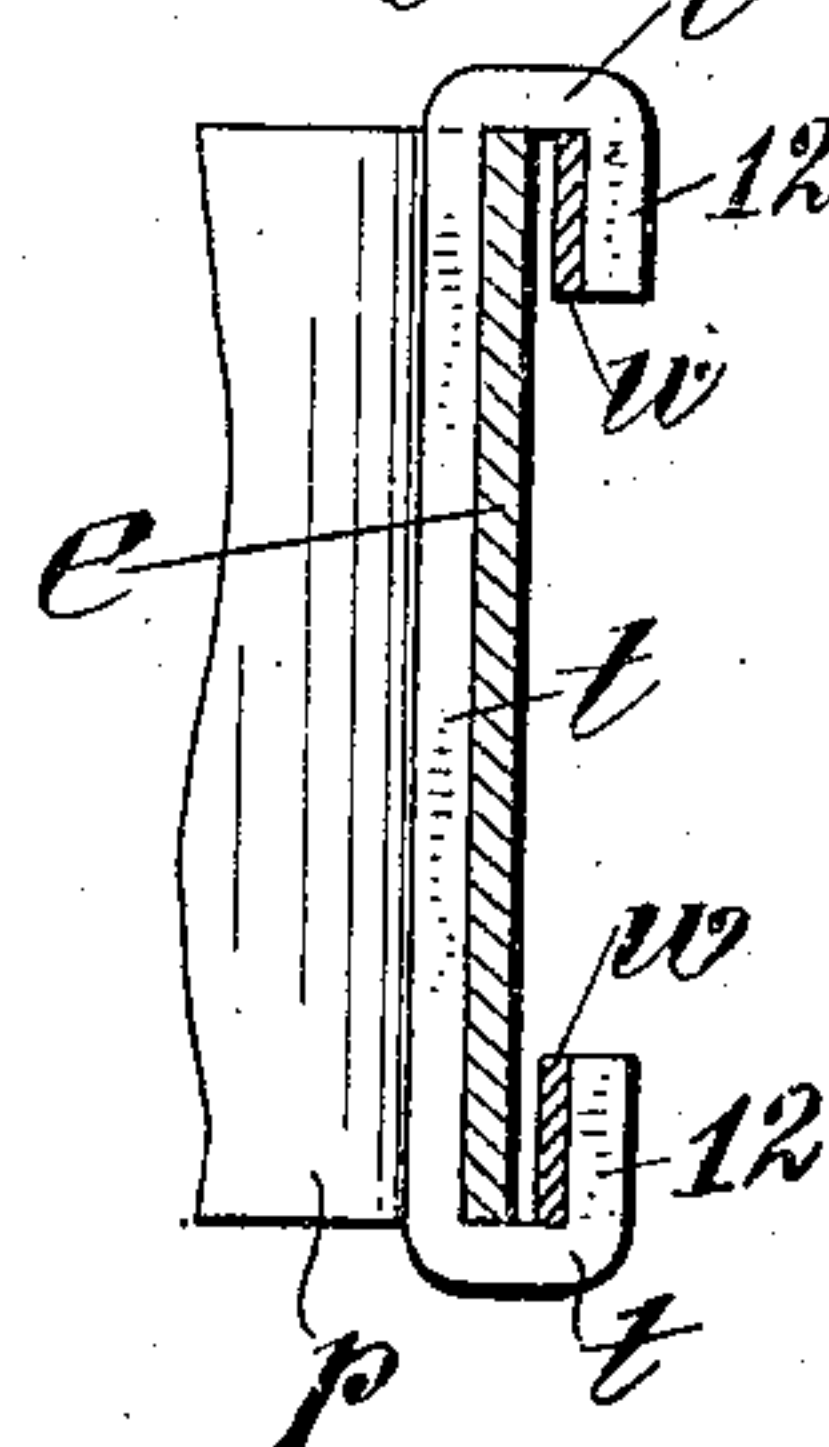


Fig. 7.

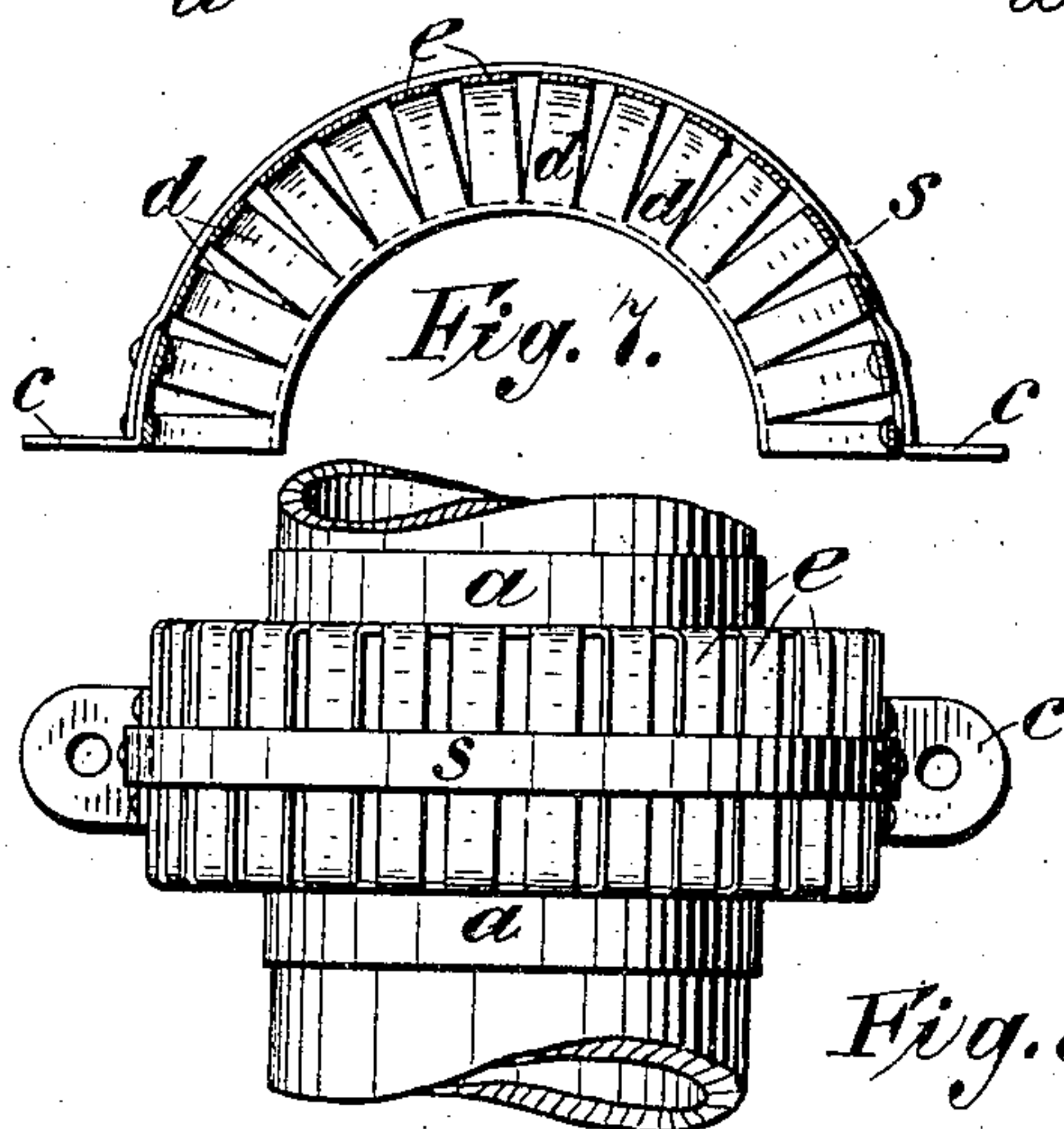


Fig. 6.

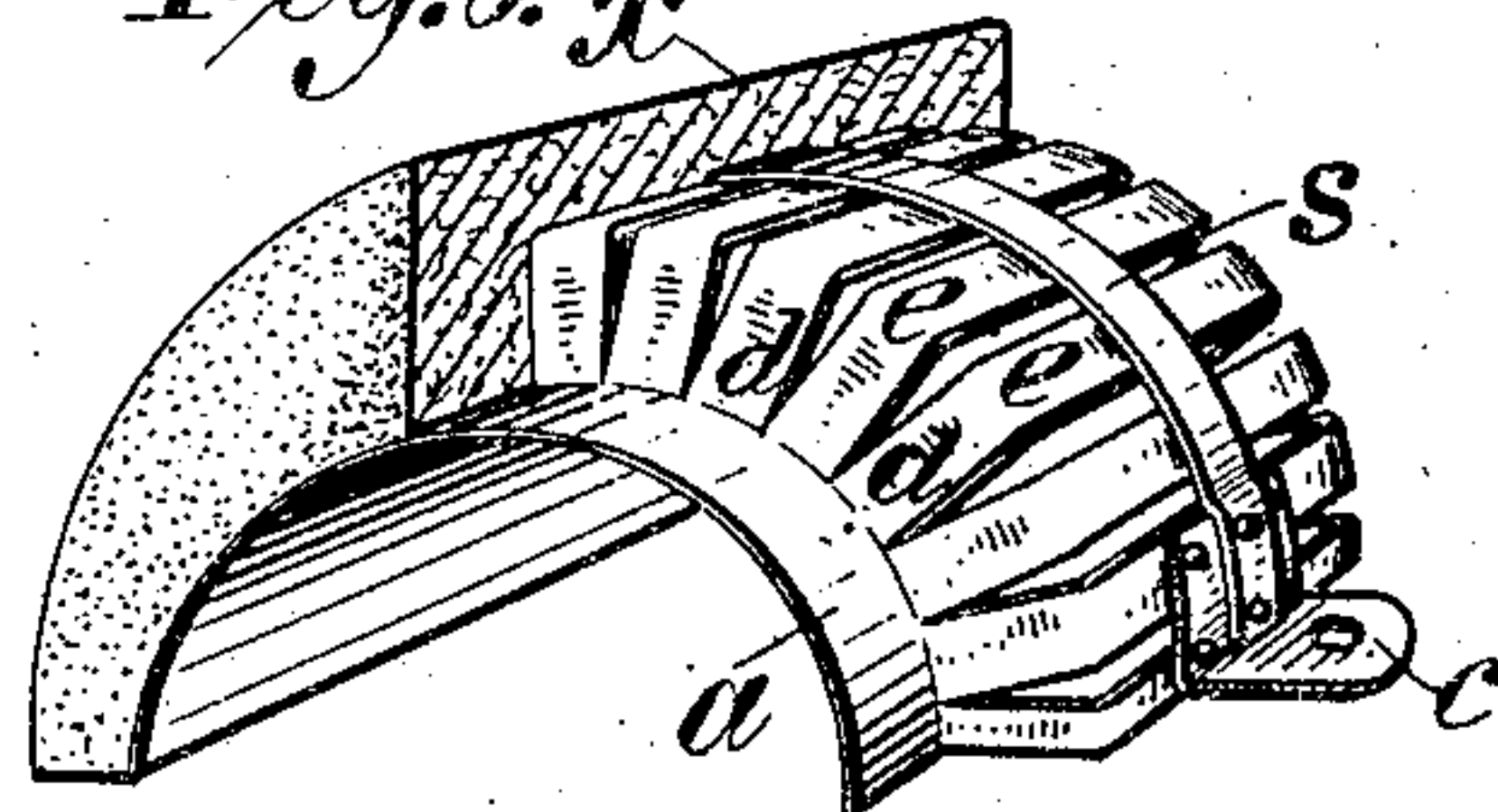


Fig. 8.

Witnesses
A. M. Donlevy
J. C. Schma

Inventor
Maurice Sullivan
By his Attorney, King & King

UNITED STATES PATENT OFFICE.

MAURICE SULLIVAN, OF NEW YORK, N. Y., ASSIGNOR TO SULLIVAN INSULATION COMPANY,
A CORPORATION OF NEW YORK.

PIPE-COVERING.

No. 876,606.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed July 25, 1907: Serial No. 385,462.

To all whom it may concern:

Be it known that I, MAURICE SULLIVAN, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, county of Kings, State of New York, have invented certain new and useful Improvements in Pipe-Coverings, of which the following is a specification.

This invention relates to coverings for the connections between sections of heat insulated steam pipes and other heated pipes.

The object of the invention is to provide for covering the connections, flanged elbows, valves and similar junctions between sections of cast iron pipe where the main sections are covered with a heat insulating material and where it becomes necessary or desirable to get access to the described connections without disturbing the insulating material of the main sections of the pipe.

The device herein described and claimed is an improvement on the pipe covering shown and described in United States Letters Patent No. 754256, dated March 8, 1904, issued to the inventor, Maurice Sullivan.

In the present improved covering there is provided a pair of angular, arc-shaped strips of sheet metal, such as galvanized iron; there is a horizontal part which engages the surface of the pipe and a vertical part bent at a right angle to the horizontal part, the vertical part is cut or slitted to permit it to take the arc-shape form of the pipe and to provide a clench for the plastic heat insulation applied to its outer surface. There is a strip of sheet metal supported on the ends of the slitted or cut strips, the ends of these strips are flanged and have ears or connections to provide for bolting the arc-shaped sections together; the width of the strip may be varied to accommodate the size of the pipe connection to be covered. In a specific modification the vertical sections and intermediate strip of sheet metal and the arc-shaped strips are of one integral piece, the vertical sections and the intermediate section are all cut and slitted and a central strap exterior to the central strip or sheet is provided with ears for connecting the arc-shaped sections together and for strengthening the intermediate strip. A thick coating of a plastic mass formed of comminuted asbestos or similar heat insulator is applied to the outer surface of the sections of covering.

The accompanying drawings illustrate the invention.

Figure 1 is a view of the sheet metal pipe covering with a portion of the heat insulation in position and a portion cut away. Fig. 2 is a sectional top plan view. Fig. 3 is a top plan view. Figs. 4 and 5 are details of structural features. Figs. 6, 7 and 8 show modifications in the structure of the sheet iron frame work.

There is an arc-shaped strip of sheet metal, *a*, such as galvanized iron, integral therewith is a vertical part *d* which is slit or cut, pairs of these are bent into arc-shaped sections conforming to the outline of the pipe. There is an intermediate strip of sheet metal *e* provided with terminal flanges *p*; perforated metal ears *c* are riveted to said strip *e* close to flange *p*. The sheet metal strip *e* is fixed to the arc-shaped strips *a* by bending the ends 10 of the cut section *d* over a metal strip *w*, Fig. 4, and folding the bent ends 10 of sections *d* down onto the exterior of the intermediate section *e*. These strips *w* at opposite edges of the intermediate section *e* are held together by a series of sections of strap iron *t*, which are passed under the intermediate section *e* and have their ends 12, Fig. 5, bent over the strips *w* to hold said strips and the parts *d* and *a* in fixed relation with respect to the intermediate section *e*; three of these sections of strap iron *t* are shown in dotted lines in Fig. 1. In Fig. 2 the pipe flanges *m* and *n* are bolted together and the intermediate strip *e* is of sufficient width to take in these flanges, two sections like that shown in Fig. 1 are held together by passing bolts through the ears *c*.

In Fig. 6 the intermediate section *e* is integral with the vertical sections *d* and the arc-shaped strips *a*, the whole being one piece of sheet metal slitted and then bent into the form shown; on the outside of the intermediate section *e* is fixed a strap iron *s* to which the ears *c* are riveted, the intermediate section *e* being also riveted to the ears *c*. The form shown in Fig. 6 provides a greater clenching surface than the form shown in Fig. 1. The heat insulation, preferably comminuted asbestos is applied as a plastic coating to the entire exposed surface. The modification in Fig. 6 can be made by machinery more cheaply than the form shown in Fig. 1, which involves more hand work.

What I claim and desire to secure by Letters Patent is:

1. In a heat-insulating pipe covering the combination of angular, arc-shaped strips of sheet metal, the vertical part cut or slitted, the horizontal part adapted to fit the surface of the pipe; a strip of sheet metal supported on the ends of the slitted or cut terminals of pairs of said arc-shaped strips, ears or connecting pieces fixed to said strip to unite one arc-shaped section of sheet metal with another similar section, and a coating of heat-insulating material applied to the exterior surface.
2. A pipe covering comprising a frame formed of pairs of clamps, each clamp consisting of an angular, arc-shaped strip of sheet metal, the vertical portion slit or cut, and the horizontal portion adapted to fit the surface of the pipe, a combined connecting member

and shield consisting of an arc-shaped strip of sheet metal uniting the slitted edges of pairs of clamps, means for uniting one connecting member and shield with an adjacent connecting member and shield, and a coating of heat-insulating material applied to the exterior surface.

3. A sheet metal pipe covering having two arc-shaped flanges adapted to fit the pipe, an intermediate section fixed to the flanges by two strips, each strip fixed at an angle with respect to said section and flanges, slits or cuts in the sheet metal extending from one flange to the other and a coating of heat-insulating material applied to the surface.

MAURICE SULLIVAN.

Witnesses:

EDWIN SEGER,
GEO. M. HARRIS.