

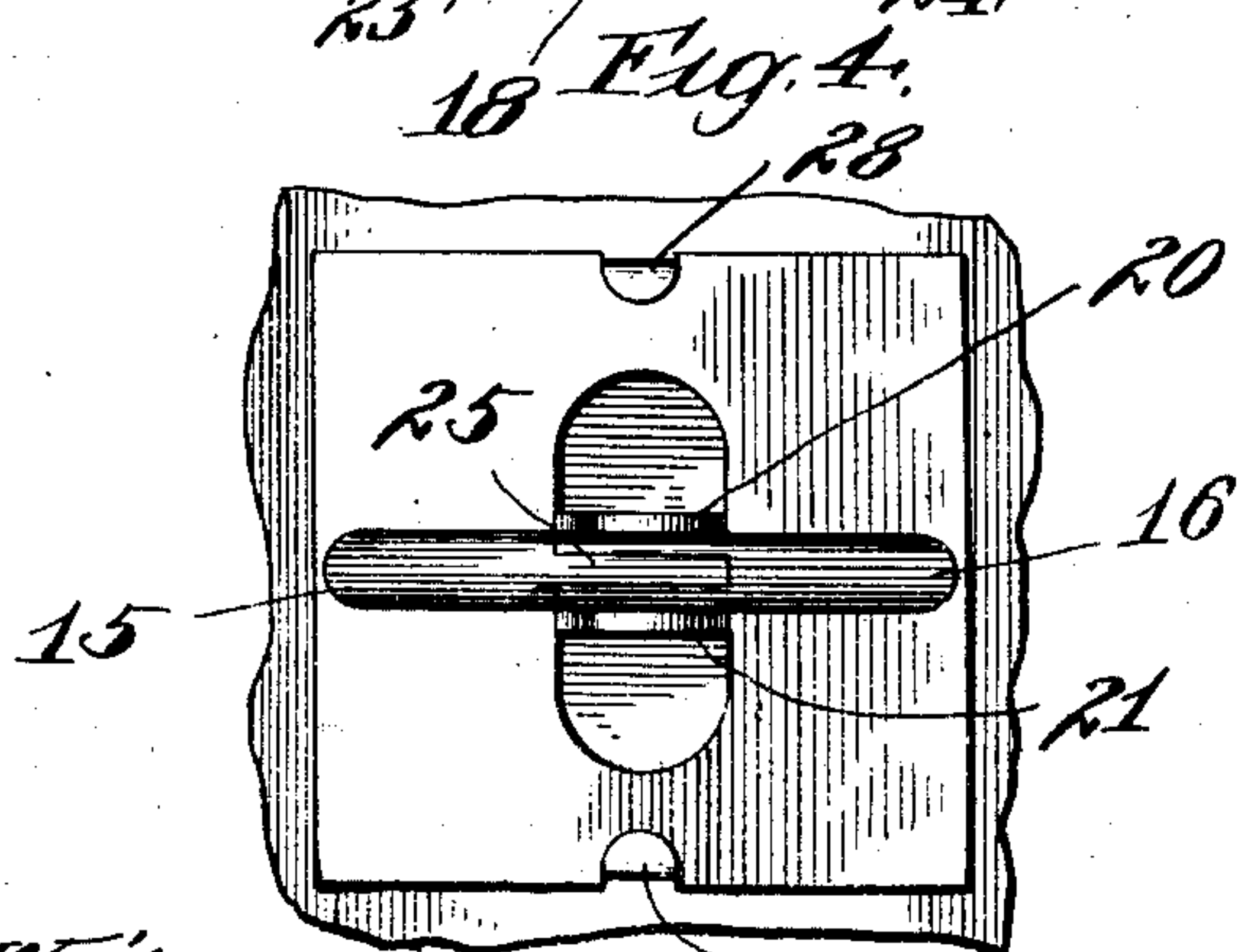
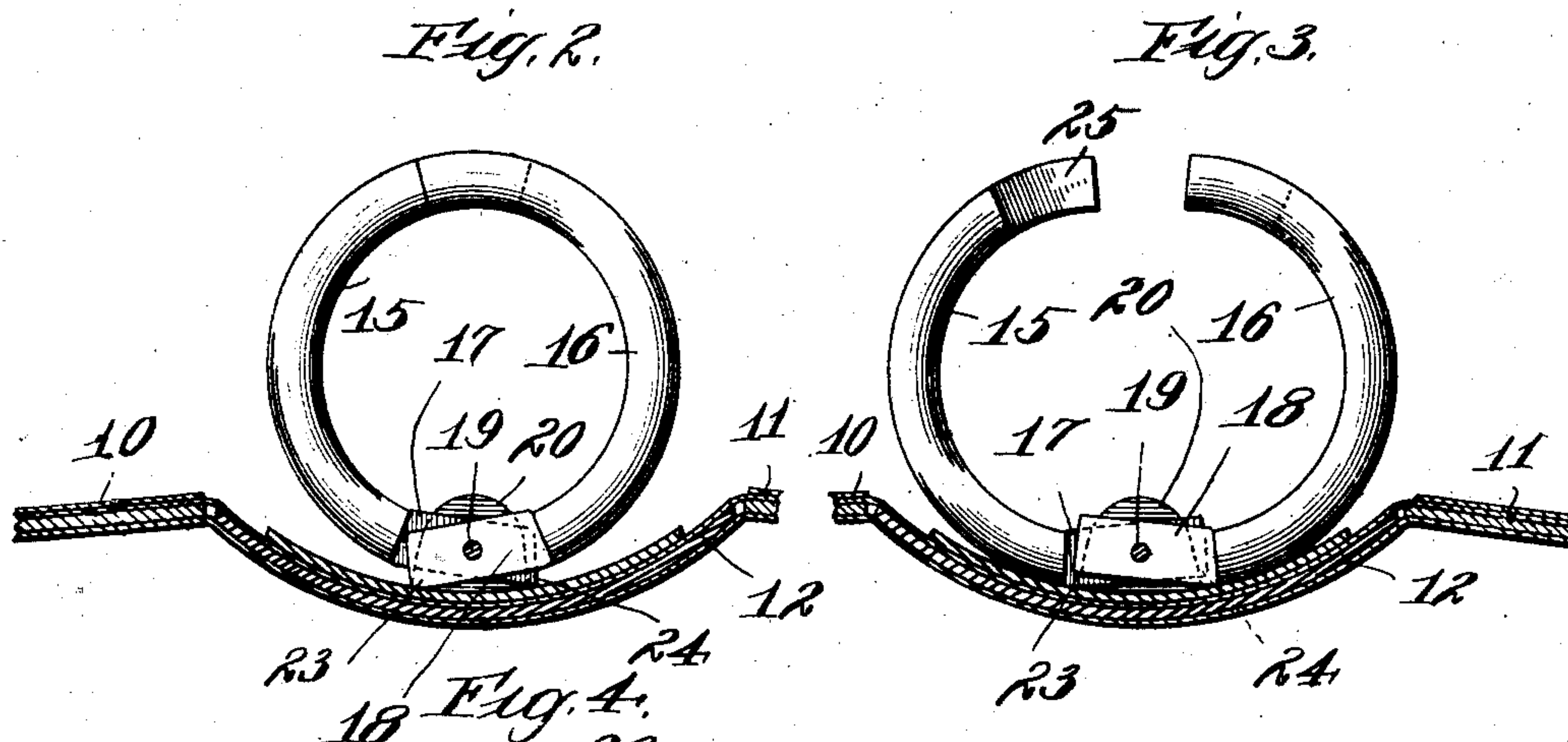
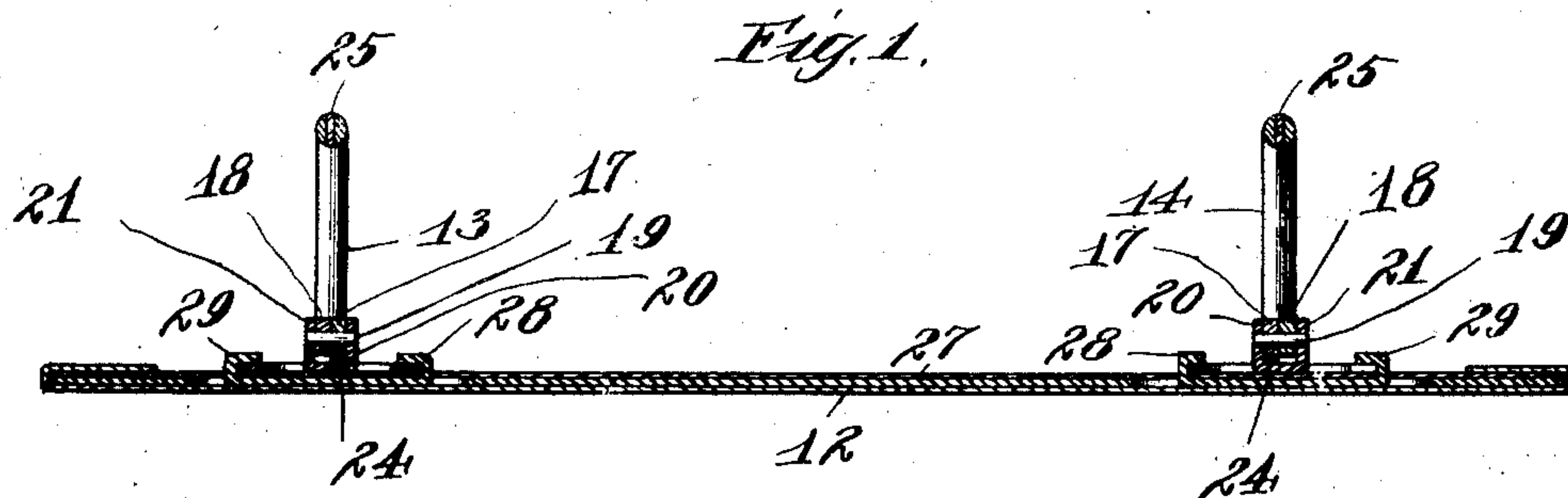
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PATENTED SEPT. 24, 1907.

J. C. DAWSON & T. E. HEETER.

LOOSE LEAF BINDER.

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# UNITED STATES PATENT OFFICE.

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## LOOSE-LEAF BINDER.

No. 866,845.

Specification of Letters Patent.

Patented Sept. 24, 1907.

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*To all whom it may concern:*

Be it known that we, JAMES C. DAWSON and THOMAS E. HEETER, citizens of the United States, and residents, respectively, of St. Louis, Missouri, and Maplewood, county of St. Louis, and State of Missouri, have invented certain new and useful Improvements in Loose-Leaf Binders, of which the following is a specification, and which are illustrated in the accompanying drawings, forming a part thereof.

10 This invention relates to that form of loose leaf binders in which the sheets to be secured are held by split rings or arches; the binder being such as is ordinarily used in connection with order blanks and forms of that character.

15 The object of the invention is to simplify and improve this form of binder; and it consists in the construction hereinafter described, and which is illustrated in the accompanying drawings, in which

Figure 1 is a central longitudinal section of the binder 20 with its arches closed; Figs. 2 and 3 are transverse sections each showing an arch in elevation, the arch being closed in Fig. 2 and open in Fig. 3; Fig. 4 is a detail plan view of the binder showing one of the arches in closed position; and Fig. 5 is a detail of one of the 25 arches showing a modified form of construction.

The binder usually comprises a pair of side plates, as 10, 11, built up of any suitable material, such as tarboard, with a paper or cloth covering, the two side plates being united by a back 12, which may be limp or 30 stiff as desired. The binding arches or rings may be of any desired number, two being shown in the drawings and designated, respectively, 13 and 14. As these two arches are alike but one need be described. Each of the arches is shown as being annular in form and consisting of two curved members 15, 16, having their ends 35 slightly overlapped. The inner ends 17, 18, of the arch members are flattened and are pierced, parallel with the axis of the arch, to receive the pivot pin 19, which is anchored in a pair of lugs 20, 21, rising from a 40 plate 22 secured to the back 12.

The invention is especially applicable to devices in

which no means are provided for opening and closing the arches, the latter being manipulated directly by the fingers of the user. In such devices as heretofore made the arch has been, when closed, loose upon the 45 pivot, the binder thus being lacking in stability and firmness. The inner ends 17, 18, of the arch members are provided with heels 23, 24, which contact with the inner face of the plate 22 when the arch is closed, and thereby hold it firmly against movement in the plane 50 of its curvature.

The outer ends of the arch members 15, 16, mate together, as shown more plainly in Figs. 1 and 4, the engagement being by a form of mortise and tenon joint, as represented at 25, and, as shown in Fig. 5, the two 55 ends being given a hook form, as shown at 26, thereby preventing the arch from being opened without first applying lateral pressure.

The plate 22 may be secured to the back 12 in any desired manner. As shown the back includes an inner 60 longitudinal metal plate 27, and lugs 28, 29, are struck up from this plate and folded over the plate 22 for the purpose of firmly securing it.

We claim as our invention—

1. In a temporary binder of the form herein shown and described, in combination, a rigid plate, a pair of lugs projecting upwardly from the plate, and a pair of complementary arch members pivotally attached to such lugs and having heels for engaging the plate when the arch is 70 closed.

2. In a temporary binder, in combination, a metal plate, a pair of lugs struck up from the plate, a pair of complementary arch members pivotally attached to such lugs and having inwardly projecting heels for bearing upon the 75 plate when the arch is closed.

3. In a loose leaf binder, in combination, a plate, a pair of mating arch members pivotally attached to the plate and adapted to have their inner ends bear thereupon when closed.

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