

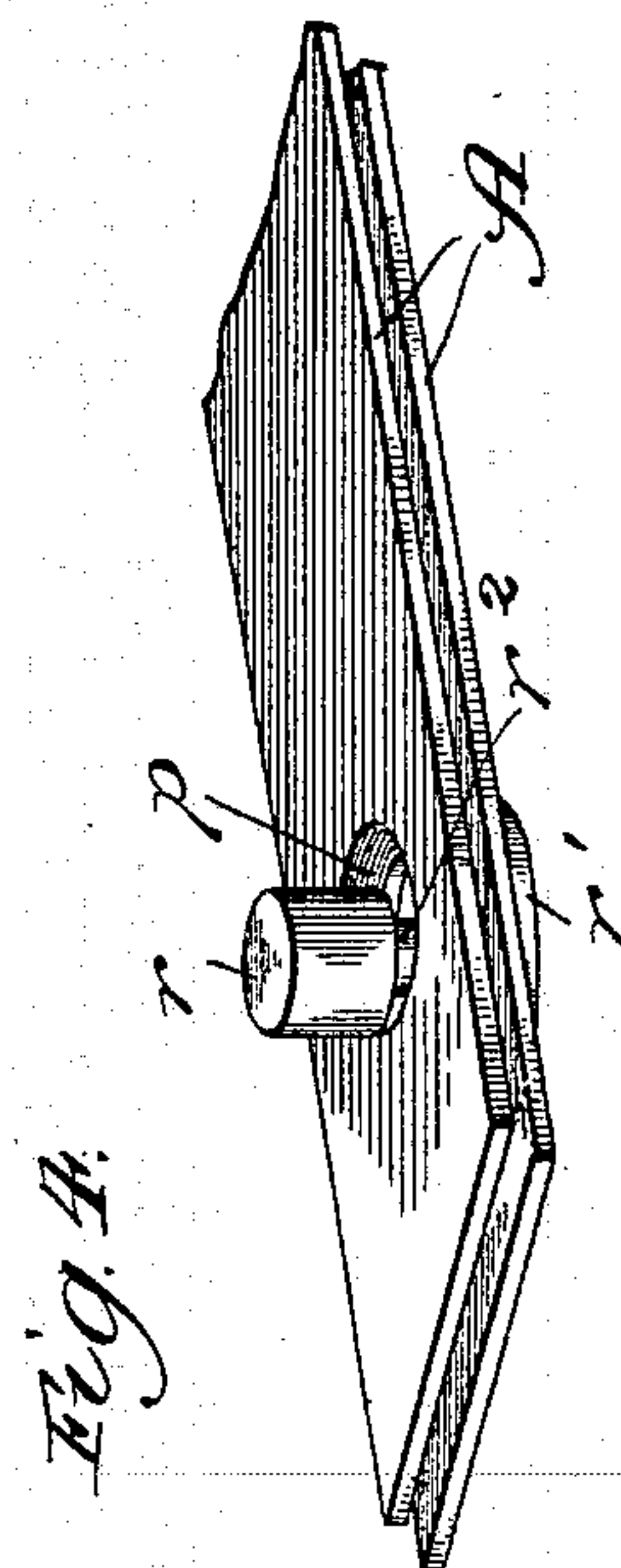
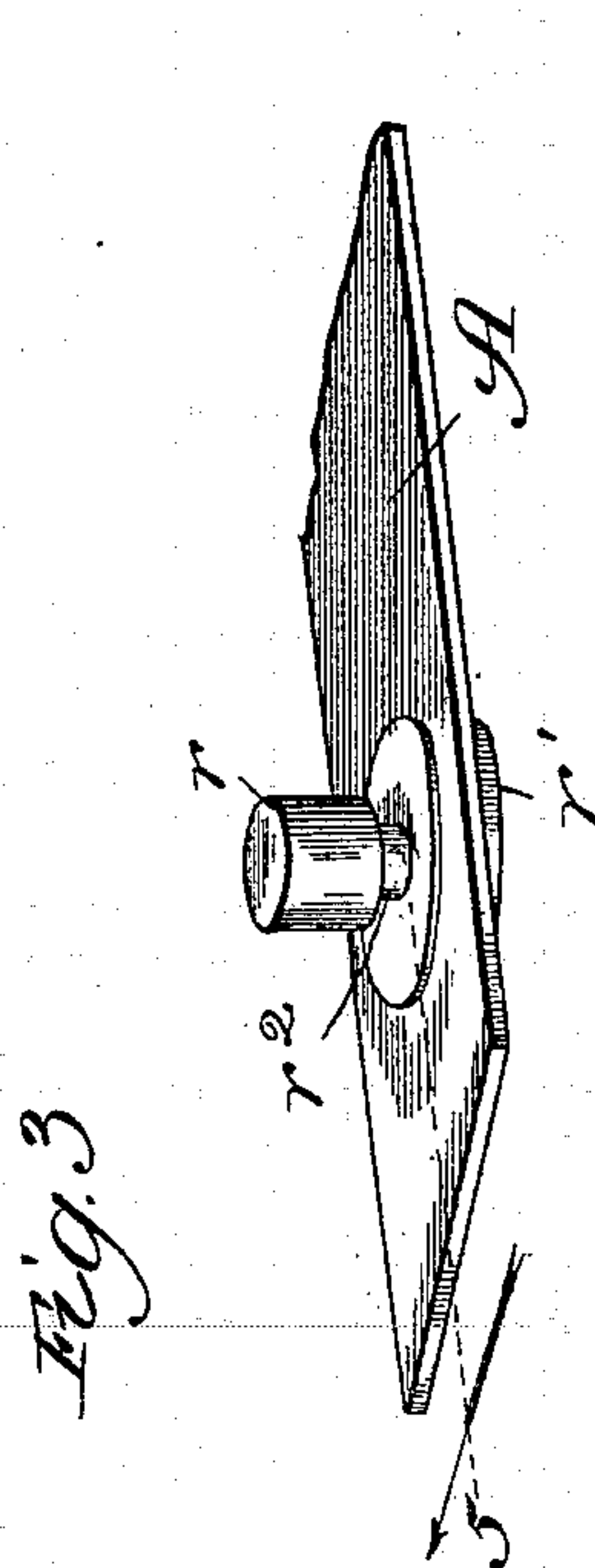
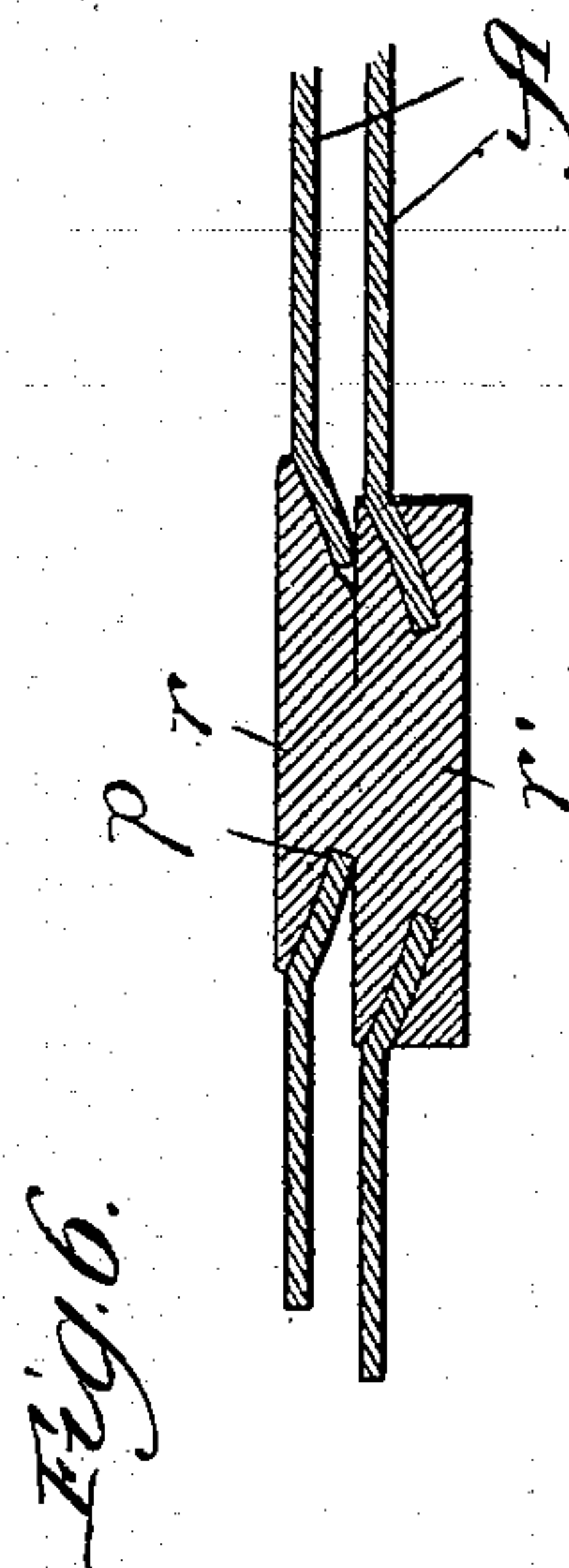
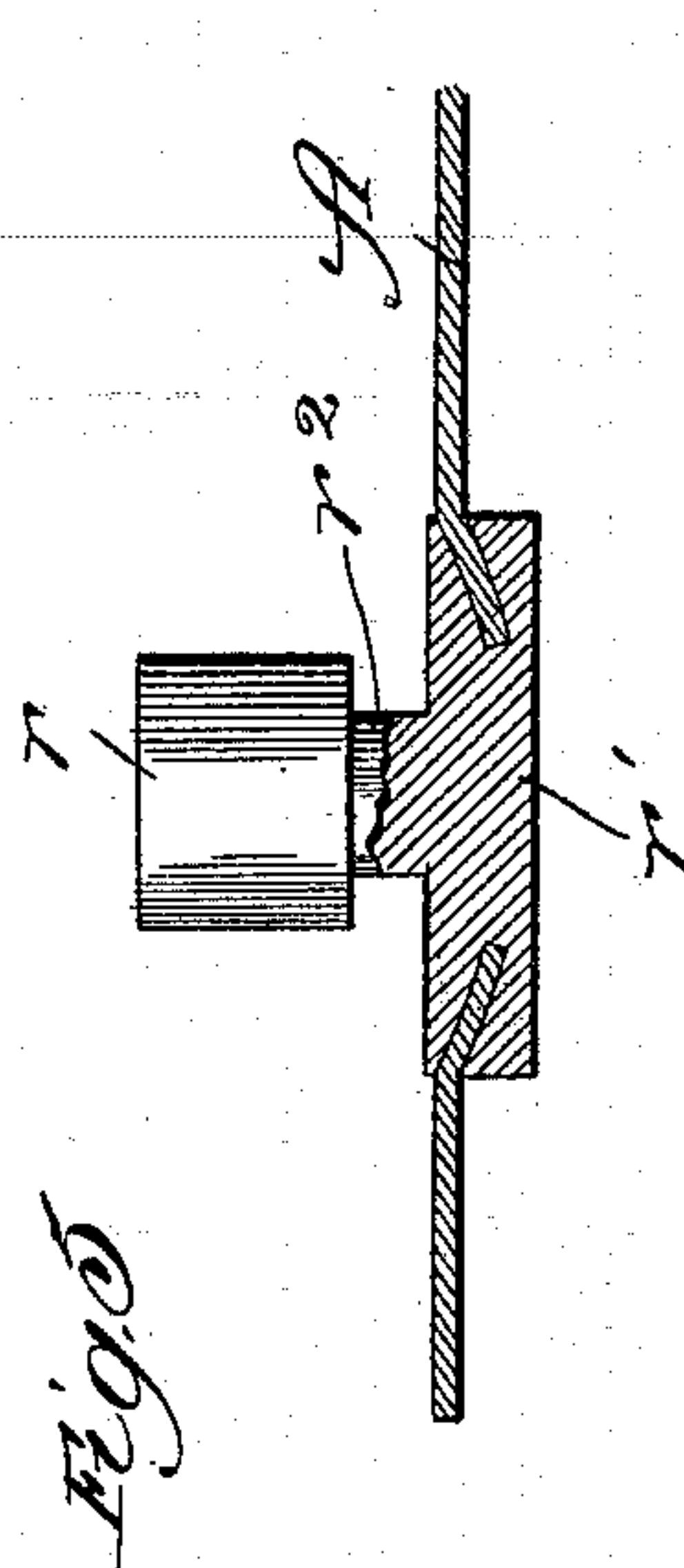
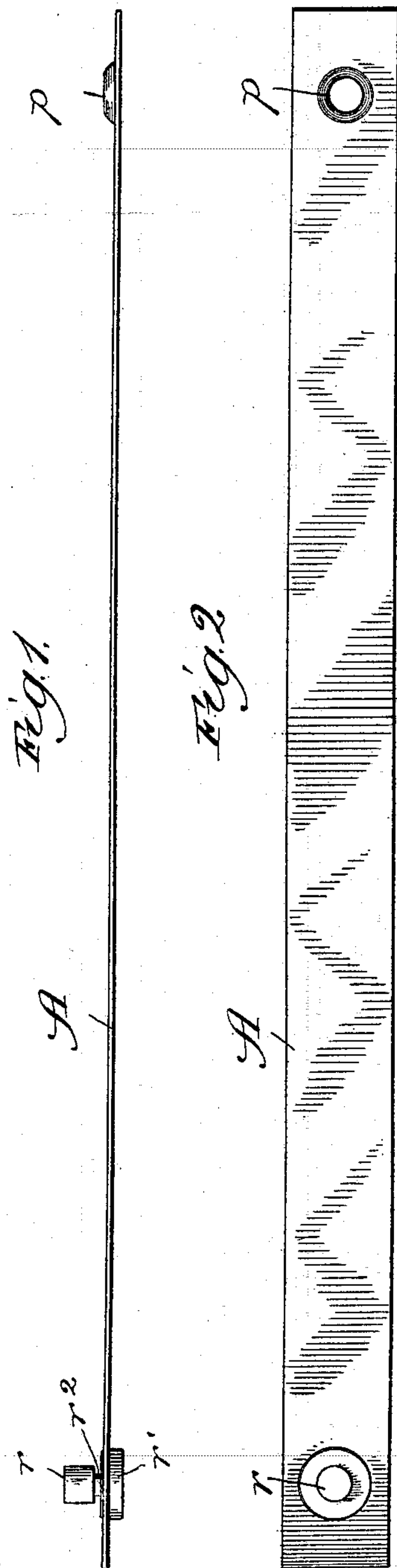
No. 615,461.

Patented Dec. 6, 1898.

A. H. PEIRCE.
CAR SEAL.

(Application filed May 2, 1898.)

(No Model.)



Witnesses:
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UNITED STATES PATENT OFFICE.

ARTHUR H. PEIRCE, OF CHICAGO, ILLINOIS.

CAR-SEAL.

SPECIFICATION forming part of Letters Patent No. 615,461, dated December 6, 1898.

Application filed May 2, 1898. Serial No. 679,440. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR H. PEIRCE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Car-Seals, of which the following is a specification.

My invention relates to an improvement in the class of car-seals in which a shackle composed of a strip of frangible metal of flexible quality or of wire carries at one end a stud of soft compressible metal, such as lead, and is provided at the other end with an eye to receive the stud, which is adapted to be upset, as through the medium of a hand-punch, to fasten together the two ends of the shackle. The metal composing the shackle is of more or less springy quality. Owing to this springiness a difficulty is experienced in the operation of applying the seal to its purpose. In applying the eye at one end over the stud at the other end the two shackle ends should be brought close together and remain in that condition while the stud is being upset, so that the two ends shall be tightly or closely clamped together by the upset stud. It is found, however, in practice that the springy quality of the shackle when bent upon itself tends to withdraw the eye end along the stud after the eye has been applied thereto preparatory to the upsetting operation, whereby since the application of the punch upsets the stud only to the outer surface of the shackle end about the eye if the latter surrounds the stud at a point more or less removed from the adjacent surface of the other shackle end the security of the sealing effect of the seal will be impaired.

The object of my improvement is to overcome the difficulty referred to. This I accomplish by providing the stud with a recess close to the adjacent shackle end surface to engage the eye in the other shackle end and hold the latter against displacement from close contact with the surface of the shackle end carrying the stud by the separating tendency of the springy quality of the shackle.

Referring to the accompanying drawings, Figure 1 is an edge view of a car-seal provided with my improvement in its preferred form; Fig. 2, a plan view of the same; Fig.

3, an enlarged perspective view of the stud-carrying end of the shackle, showing the preferred circumferential recess form of detent about the base of the stud; Fig. 4, a similar view showing the two shackle ends adjusted together preparatory to upsetting the soft-metal stud to fasten them; Fig. 5, a section taken at the line 5 on Fig. 3 and viewed in the direction of the arrow, and Fig. 6 a section taken lengthwise through the ends of the seal after they have been fastened together by upsetting the stud.

A is the shackle, shown in the form of a flat strip usually composed of a frangible quality of tin, though for my purpose the material composing the shackle may be wire. In one end of the shackle is fastened the stud r , of lead, projecting at one side from a disk-shaped head r' on the opposite side. The other end of the shackle contains the eye p , shown as countersunk or dished. About the base of the stud is formed a recess r^2 to afford the detent, though it may be provided in any other form that will subserve my purpose.

In applying the seal to its purpose the shackle is bent upon itself to adjust the eye p over the stud r preparatory to applying a punch (not shown) to upset the stud. In thus adjusting the eye it catches, as represented in Fig. 4, in the recess r^2 , wherein the eye-equipped shackle end is detained against the tendency to spring away and carry the eye along the stud. The resilient nature of the shackle causes the eye-containing end thereof, when the eye therein is threaded over the soft-metal stud on the opposite end and is seated in the recess, to exert an outward and upward pull, thereby causing the lower edge of the eye to impinge tightly against the wall of the recessed portion of the soft-metal stud, thus holding the eye end of the shackle securely against accidental displacement previous to sealing. The stud is then upset into the condition in which it is represented in Fig. 6, wherein it clamps the shackle ends together in desired close proximity to their opposing surfaces owing to the retention by the recess r^2 of the eye-equipped end at the base of the stud.

If the shackle be formed of wire, one end is equipped with the soft-metal stud, recessed

near its base, and the other end has an eye to be slipped over the stud and engaged with the recess therein, as in the case of the sheet-metal shackle.

5 What I claim as new, and desire to secure by Letters Patent, is—

A car-seal comprising a shackle of resilient material adapted to be bent back upon itself to form a loop, and provided at one end with
10 a soft-metal stud having at its base a recess, and at its opposite end with an eye adapted

to be threaded over the stud and to engage in the recess therein when the shackle ends are brought together in the bending operation, and to be retained therein by the resiliency of the shackle-body previous to sealing, substantially as and for the purpose set forth. 15

ARTHUR H. PEIRCE.

In presence of—

R. T. SPENCER,
DAN. W. LEE.