

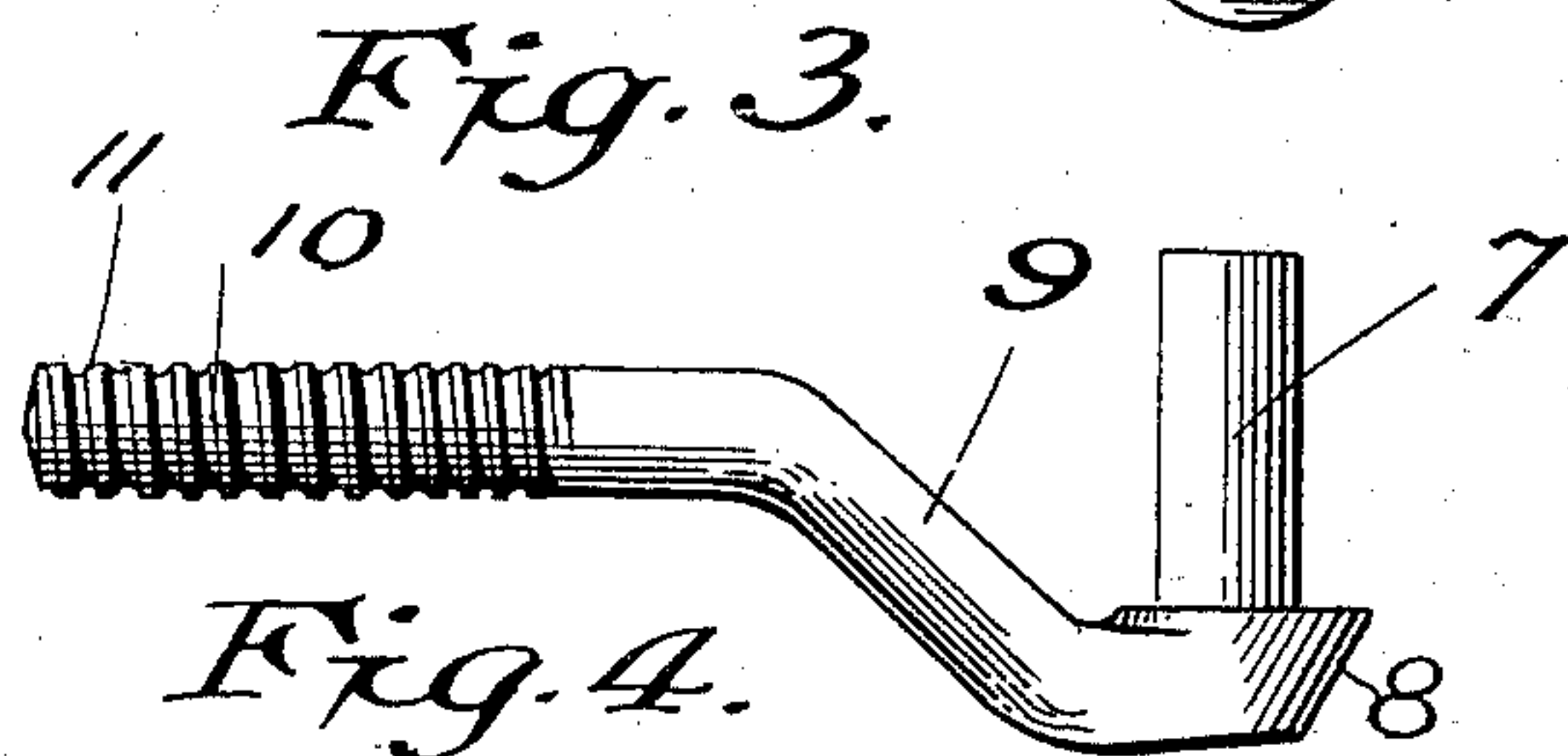
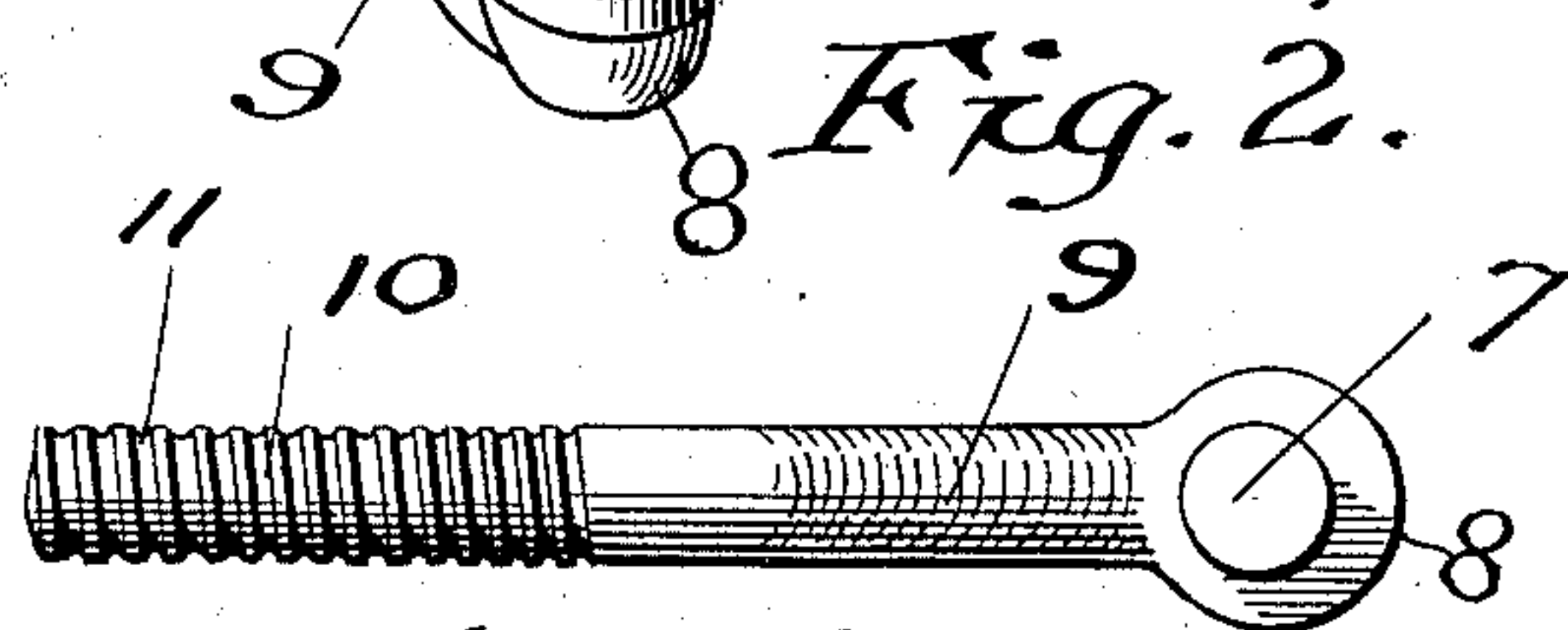
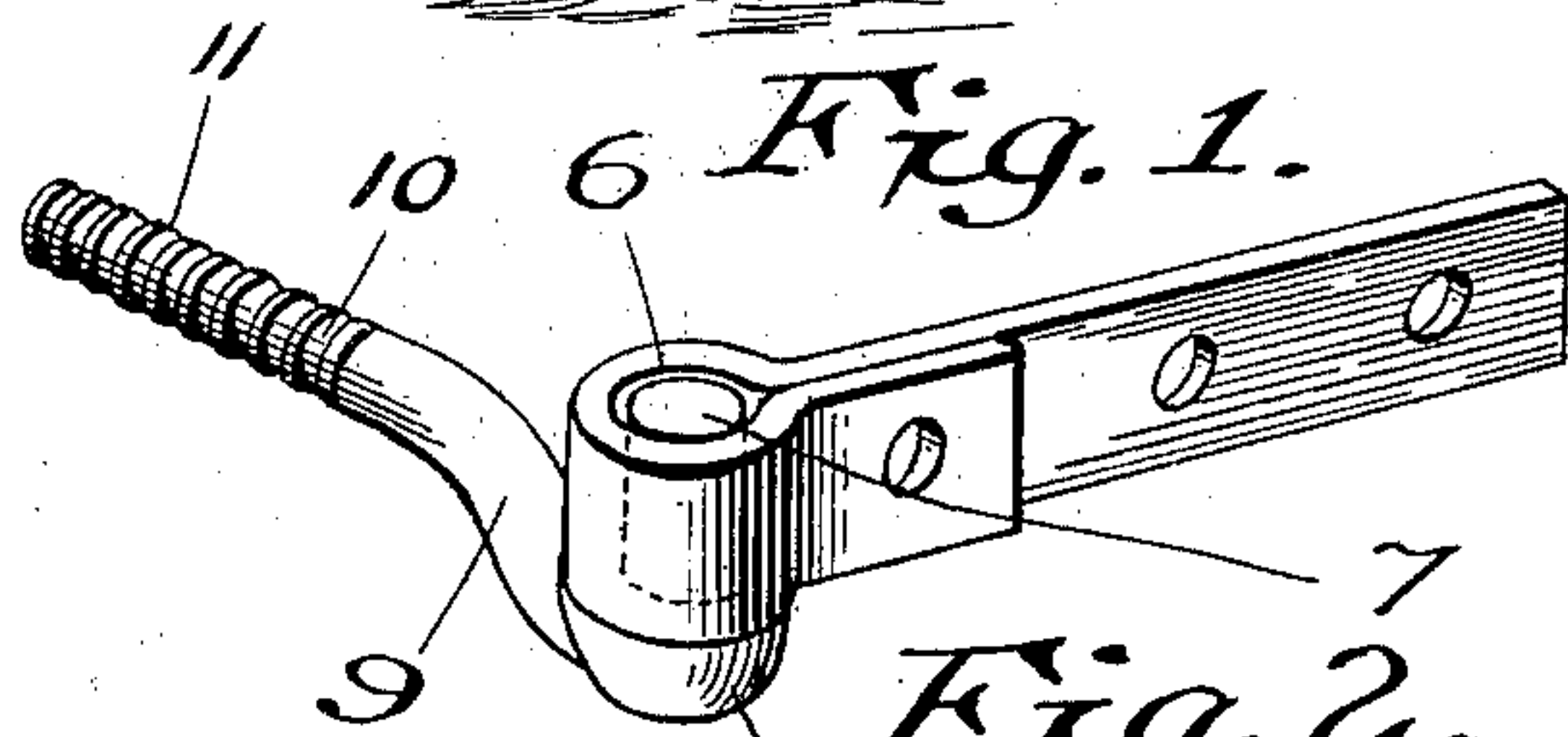
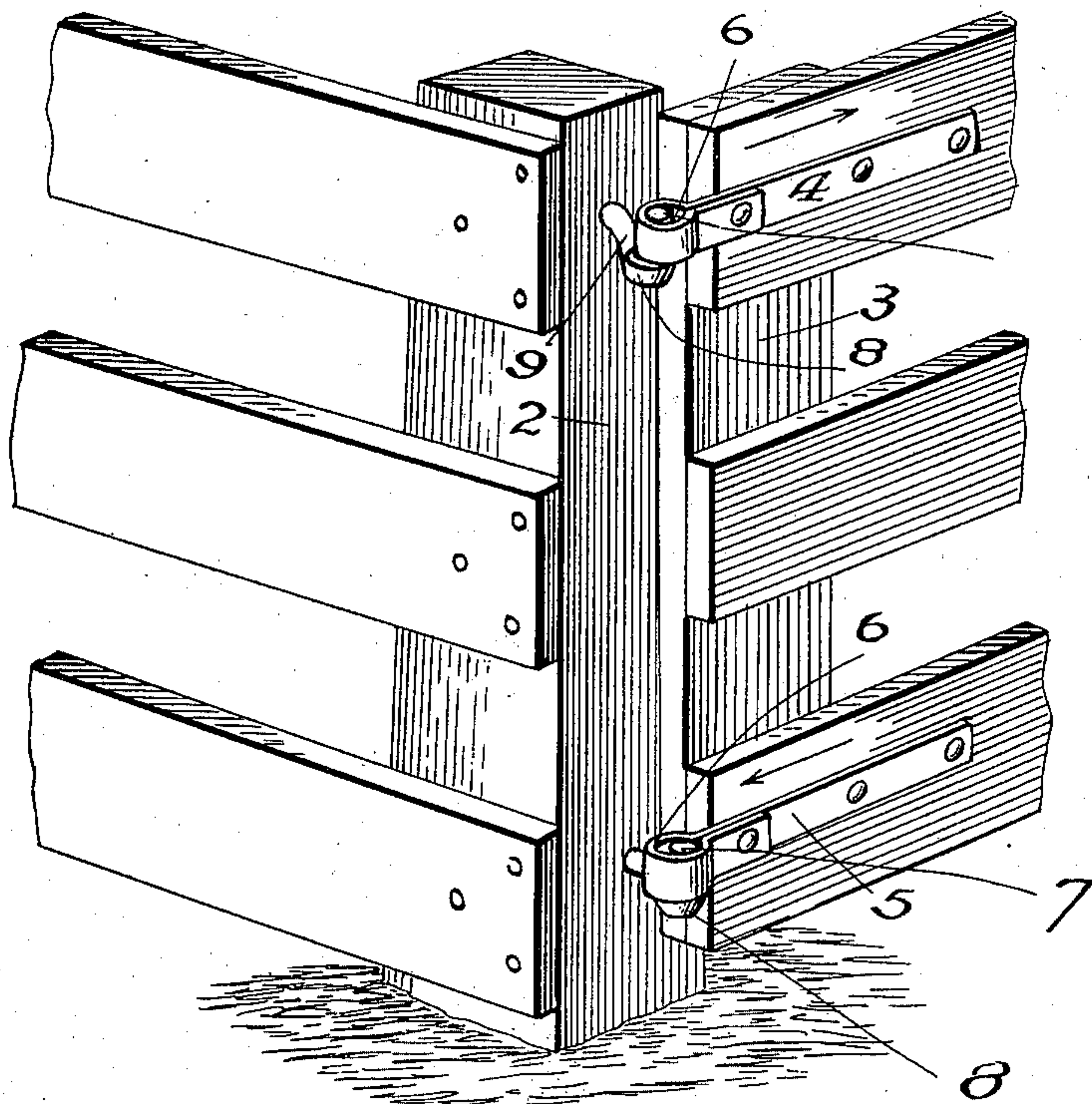
No. 610,243.

Patented Sept. 6, 1898.

H. RENO.
GATE HINGE.

(Application filed Aug. 7, 1896.)

(No Model.)



Witnesses;
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UNITED STATES PATENT OFFICE.

HOWARD RENO, OF FOLSOM, TERRITORY OF NEW MEXICO.

GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 610,243, dated September 6, 1898.

Application filed August 7, 1896. Serial No. 601,993. (No model.)

To all whom it may concern:

Be it known that I, HOWARD RENO, a citizen of the United States, residing at Folsom, in the county of Union and Territory of New Mexico, have invented certain new and useful Improvements in Gate-Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to gate-hinges; and the object of the invention is to provide a farm-gate hinge, a pair of which attached to a gate will hold their positions almost indefinitely, as opposed to the short-lived hinge connections in common use.

A particular object of the invention is to provide a farm-gate hinge which will be no more expensive than the ordinary hinge and will closely resemble the ordinary gate-hinge.

My invention consists in a gate-iron comprising a shank and a pintle at right angles thereto, the middle of said pintle being in line with the axis of said shank and adapted to hold a hinge strap or eye in the same position, whereby the pull of the strap is equalized upon opposite sides of the axis of the shank.

The invention will be more readily understood by reference to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view illustrating my invention. Fig. 2 is an enlarged perspective view of the hinge. Fig. 3 is a plan view of the gate-iron. Fig. 4 is a side view thereof.

As shown in the drawings, 2 represents the gate-post, and 3 represents a section of a gate on which are the hinge-straps 4 and 5. The eye 6 of each strap is of a cylindrical form, as usual in like farm-gate hinges. The other part of each hinge comprises a pintle 7 of a cylindrical form erected upon the enlarged end or head 8. The shank 9 of this part of the hinge is bent upwardly from the end or head 8 to a point substantially opposite the middle of the pintle 7 and then extends back at right angles with the pintle. The straight portion 10 of the shank is usually provided

with threads 11, and said straight part, as shown in Fig. 1, is secured in the gate-post with the bent portion 9 extending downwardly, so that the pintle projects upward to receive the eye of the strap. Ordinarily the eye is somewhat larger than the pintle in order to allow free play, all parts being comparatively rough in formation.

The main feature of my invention lies in the relations of the shank to the pintle, the valuable construction being one wherein the middle of that portion of the pintle which is occupied by the strap-eye is substantially opposite the center or axis of the shank, for the reason that when a side pull and the opposite force is exerted upon the pintles of the two hinges there would otherwise be a tendency to turn the pintles and the shanks, which movement, if often repeated, would wear out the sockets or holes into which the shanks are screwed and eventually loosen the shanks to such an extent that they would pull out of the post. It is for this reason that the ordinary gate-hinge is unreliable and requires constant attention. The force or weight of the gate is exerted upon the two pintles, as indicated in Fig. 1, where it will be seen that the upper strap draws against the pintle, while the lower strap pushes against its pintle. With hinges of the construction herein described the pull and the push of the gate upon the pintles is directly against the pintle and the shank, taken as a whole, and being equalized upon opposite sides of the axis of the two shanks the swinging of the gate does not tend to rack or twist the shanks in the post.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A gate-hinge, comprising a shank and a pintle at right angles thereto, and a strap or eye arranged upon said pintle and the middle of said eye being in line with or coincident with the axis of said shank, substantially as described.

2. The gate-iron, comprising the shank and the pintle at substantially right angles to one another, and the middle portion of that part

of the pintle which is occupied or engaged by
the hinge-strap being in line with the axis of
said shank, whereby the force of the hinge-
strap upon said pintle will be equally divided
5 upon opposite sides of the axis of said shank,
substantially as described.

In testimony whereof I have signed this

specification in the presence of two subscrib-
ing witnesses.

HOWARD RENO.

Witnesses:

JOHN KING,
H. J. COLLINS.