

No. 695,487.

Patented Mar. 18, 1902.

J. W. PITTS.
SPIKE EXTRACTOR.

(Application filed Mar. 18, 1901.)

(No Model.)

Fig. 1

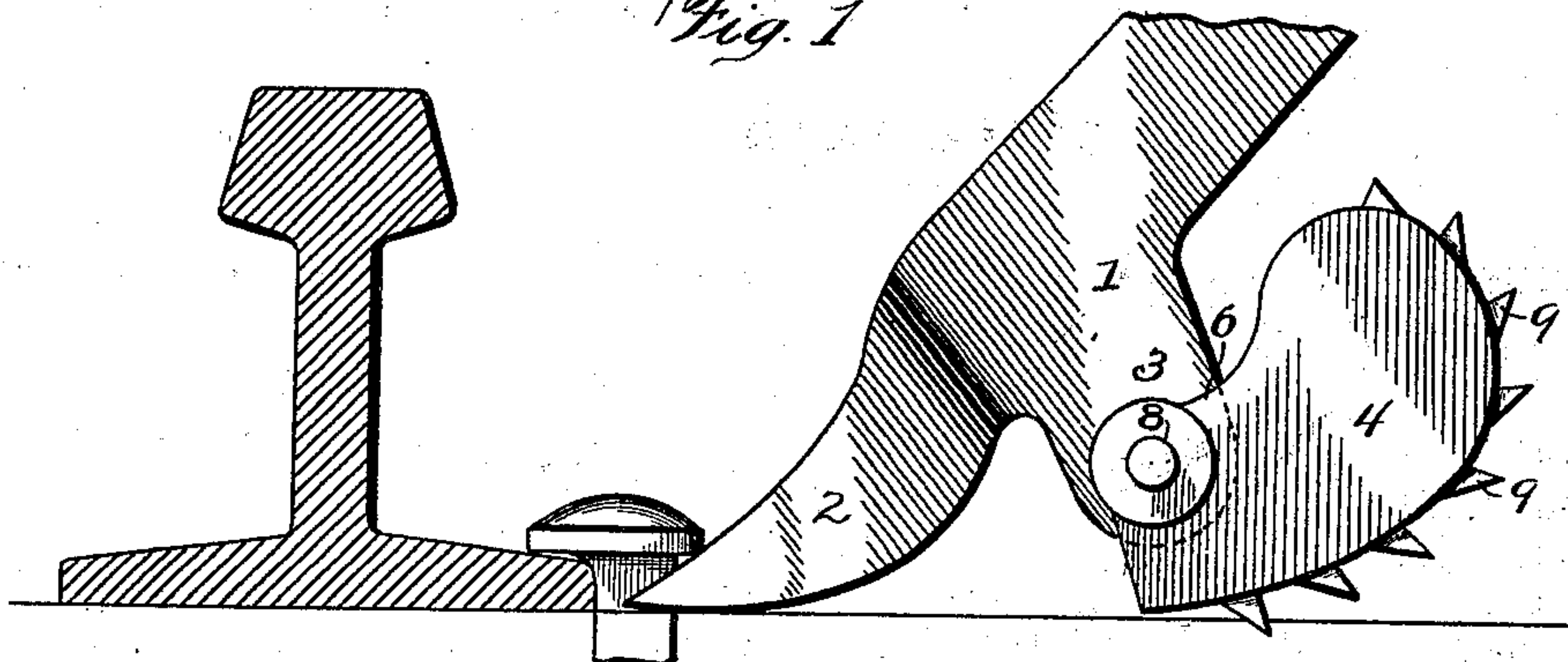


Fig. 2.

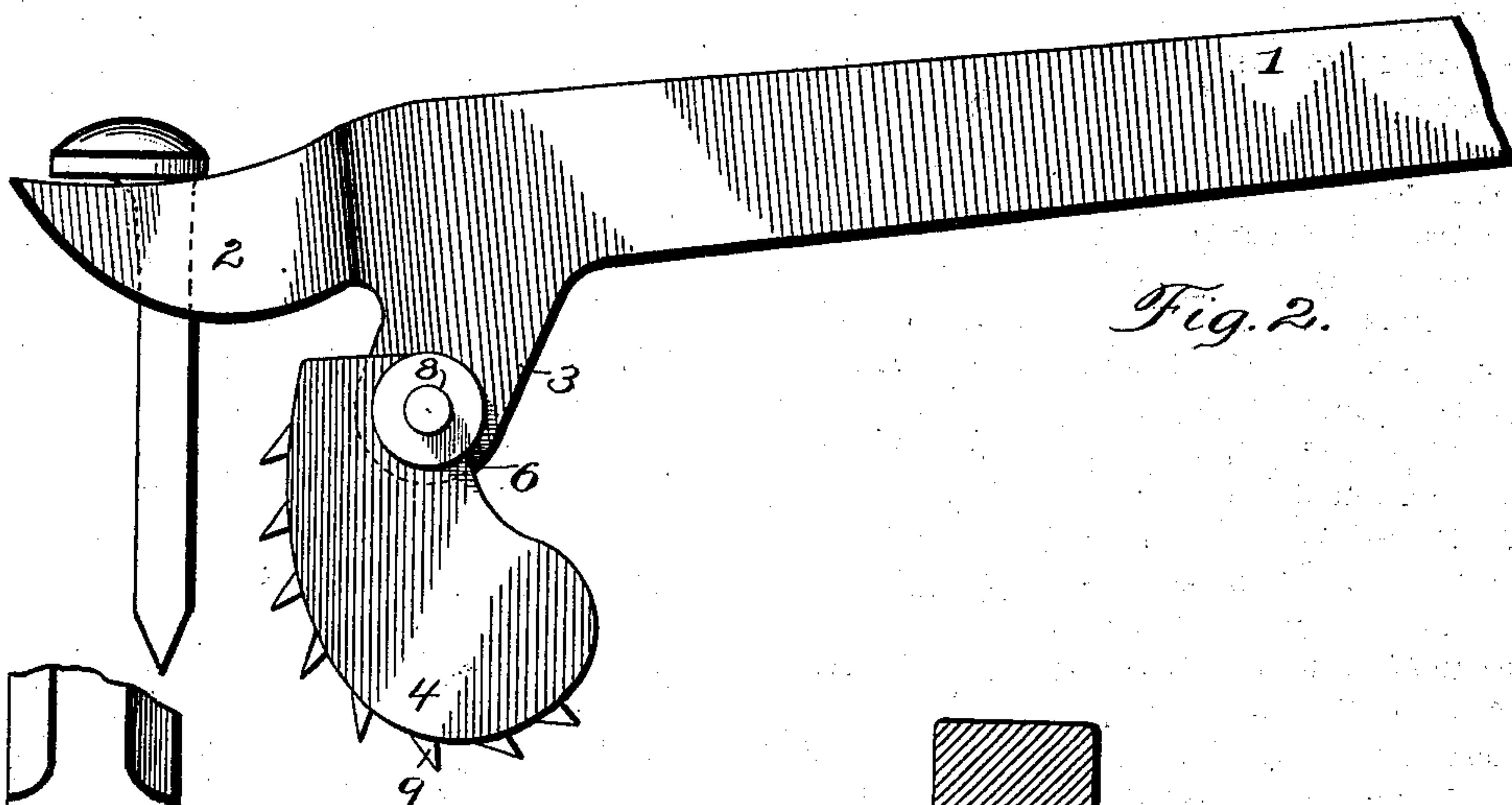


Fig. 3.

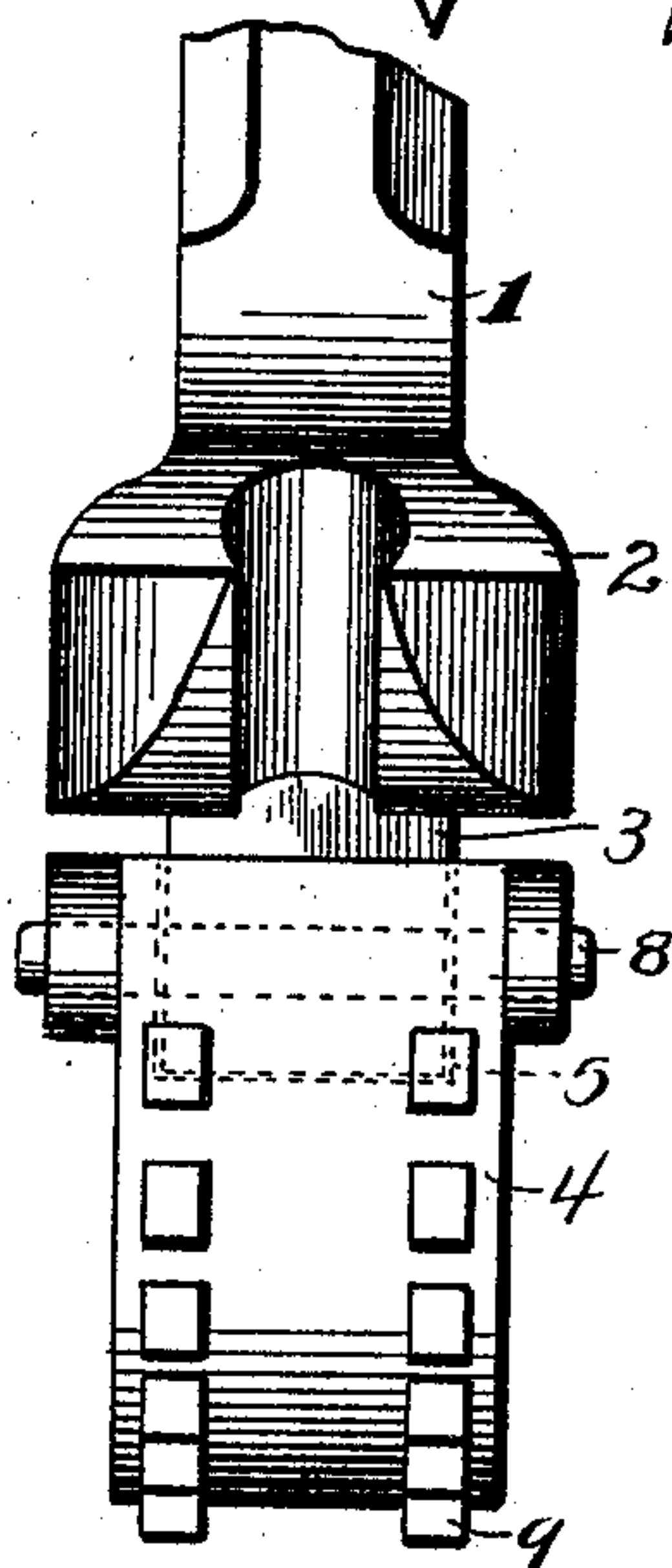
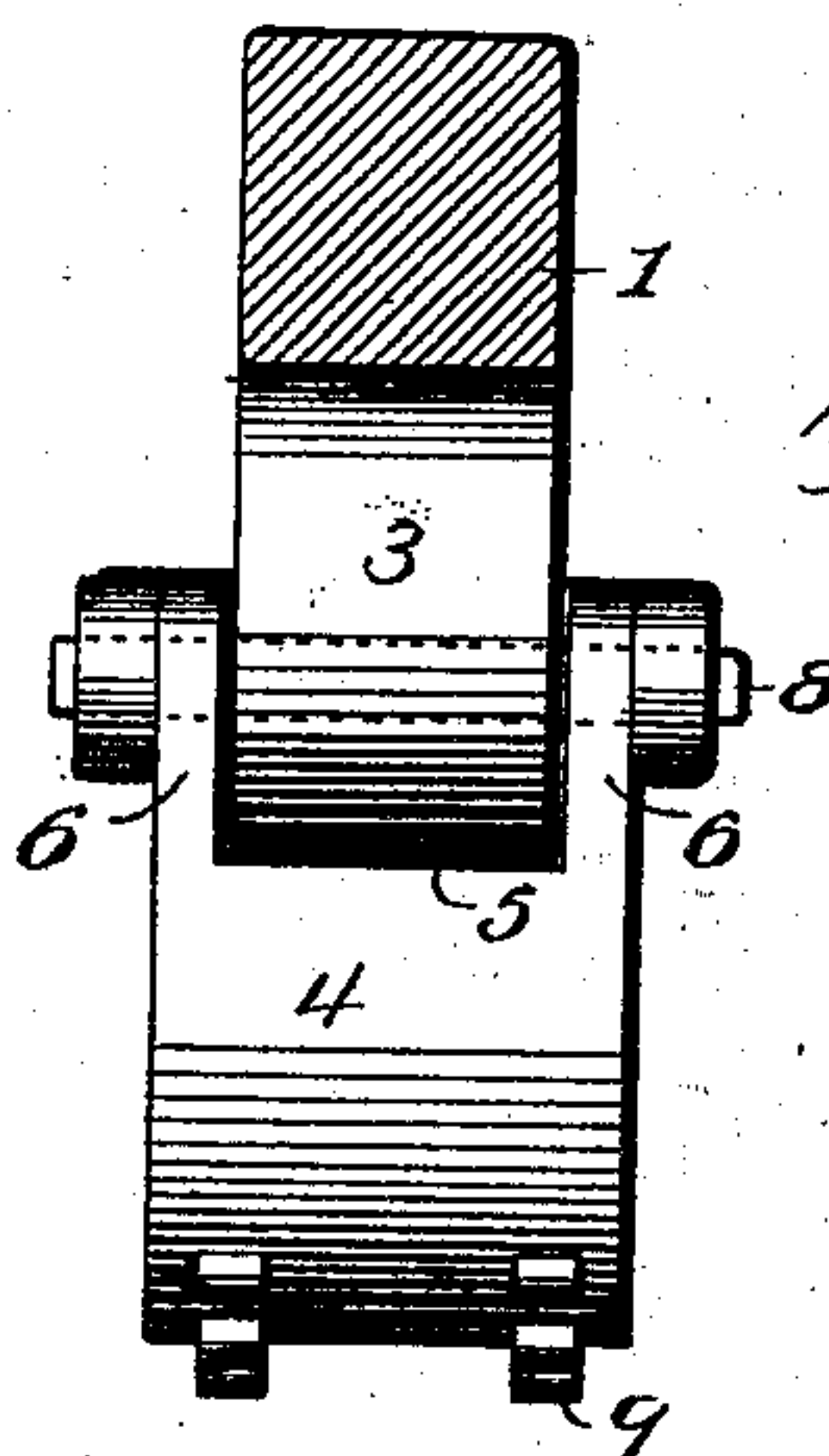


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH W. PITTS, OF AUGUSTA, GEORGIA.

SPIKE-EXTRACTOR.

SPECIFICATION forming part of Letters Patent No. 695,487, dated March 18, 1902.

Application filed March 13, 1901. Serial No. 50,984. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH W. PITTS, a citizen of the United States, residing at Augusta, in the county of Richmond and State of Georgia, have invented a new and useful Spike-Extractor, of which the following is a specification.

The invention relates to improvements in spike-extractors.

10 The object of the present invention is to improve the construction of spike-extractors and to provide a simple, inexpensive, and efficient one adapted to readily extract a spike from a cross-tie without bending or otherwise injuring the same and capable of afford-
15 ing a firm bearing for the lever and of enabling the bearing to be readily shifted as the spike is extracted.

20 The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claim hereto appended.

25 In the drawings, Figure 1 is a side elevation of a spike-extractor constructed in accordance with this invention and showing the same arranged for extracting a spike. Fig. 2 is a similar view showing the arrangement of the fulcrum or bearing block when the
30 spike is extracted. Fig. 3 is a front elevation of the spike-extractor. Fig. 4 is a rear elevation of the same.

35 Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a lever provided with a spike-engaging claw 2 and having a depending heel 3 located in the rear of the spike-engaging claw and extending downward at an
40 approximately acute angle to the same and having a rounded lower edge to fit a corresponding concave bearing-face of a bearing or fulcrum block 4. The claw, which is tapered, as illustrated in the accompanying
45 drawings, is adapted to engage a spike beneath the head thereof in the usual manner, and the fulcrum or bearing block, which is curved, is provided at its inner end with a recess 5 to receive the rounded heel. The
50 curved bearing-block, which has a straight inner or front face, presents an upper concave face and has a lower convex face, which

merges into the outer end face, and the latter is rounded or convexly curved. The recess forms the concave face and provides sides
55 or flanges 6, which are perforated for the reception of a pivot 8. The concave bearing-face is adapted to relieve the pivot of strain, and it is arranged concentric with the pivot, similar to the curved lower edge of the heel. 60
The bearing or fulcrum block is connected at one end with the said heel, and its lower face is curved and forms a cam and is adapted to fit against the upper face of the cross-tie while the spike is being extracted. The
65 curved cam-face of the bearing or fulcrum block is provided at opposite sides with spurs 9, arranged at intervals and adapted to be embedded in the upper face of the cross-tie, whereby the bearing-block will afford a
70 firm support in any position which it may occupy during the extraction of a spike, and while the spike is being extracted there is no liability of the fulcrum or bearing block rocking backward and causing the lever to bend
75 the spike. The spurs are provided with inner or front beveled faces and with outer or rear shoulders to enable them to slide readily over the upper face of a cross-tie when the lever is lifted and to engage the cross-tie firmly
80 when the pressure is applied to the lever. The lever is adapted to exert a straight upward pull on a spike, and after the latter has been partially extracted the lever may be
85 slightly lifted to permit the bearing or fulcrum block to swing inward automatically beneath the heel. The fulcrum-block extends rearward and upward beyond the depending heel when the parts are arranged as illustrated
90 in Fig. 1 of the drawings, and it is adapted to swing inward automatically when the lever is raised, until it occupies a position substantially vertical, as illustrated in Fig. 2 of the drawings. By this construction a perfectly-
95 straight vertical draw may be exerted on a spike and the latter will not be bent or otherwise injured.

It will be seen that the spike-extractor is exceedingly simple and inexpensive in construction, that it possesses great strength and
100 durability, and that it is easily operated to cause a straight upward pull on a spike to avoid bending or otherwise injuring the same while extracting it.

What I claim is—

A spike-extractor comprising a lever having a claw at one end and provided adjacent to the same with a depending heel arranged
5 at an acute angle to the claw and having the rounded outer end and the block, curved longitudinally from one end to the other, and presenting a concave upper face and a convex lower face and having its outer end rounded
10 ed and provided with a convexly-curved face forming a continuation of the curved lower face of the block, the inner end of the block

being provided with a straight face and having a recess receiving the heel, and the tapering spurs having front or inner beveled faces 15 and rear or outer shoulders and arranged at intervals, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JOSEPH W. PITTS.

Witnesses:

J. S. REYNOLDS,

P. H. CRAIG.