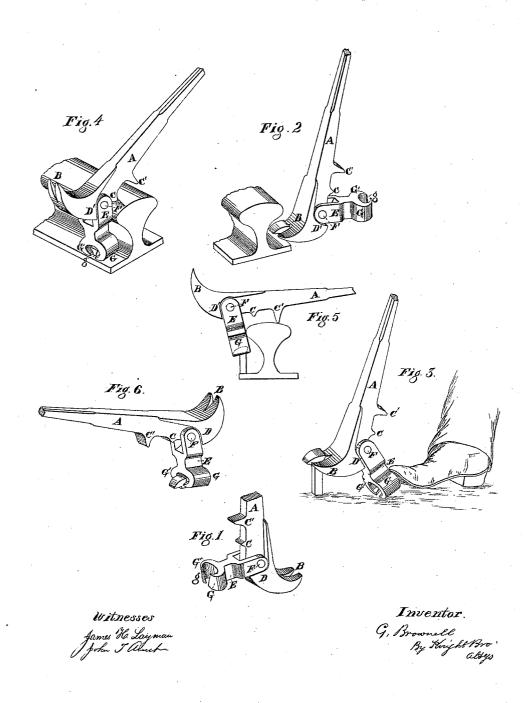
C. Bronnell, Nail Extractor,

Nºº50,899,

Patented Nov. 14, 1865.



UNITED STATES PATENT OFFICE.

GEORGE BROWNELL, OF MITCHELL, INDIANA.

CLAW-BAR.

Specification forming part of Letters Patent No. 50,899, dated November 14, 1865.

To all whom it may concern:

Be it known that I, GEORGE BROWNELL, of Mitchell, Lawrence county, Indiana, have invented a new and useful Railroad Claw - Bar; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying draw-

ings, making part of this specification.

My invention relates to sundry improvements in the common claw or crow bar employed for the extraction of railroad-spikes, said improvements resulting in a more effective instrument and one or more multifarious functions.

The drawings represent only the lower or

operative parts of the instrument.

Figure 1 is a rear view of a bar embodying my improvements. Fig. 2 shows the instrument employed in the customary way. Fig. 3 illustrates my mode of acting on an elevated object. Figs. 4 and 5 illustrate my mode of acting on a depressed object. Fig. 6 illustrates a peculiar use of my bar.

My bar A has the customary cleft extremity or sheep's foot, B. Projecting from the heel of the bar are two unequal spurs or ribs, C C'. The bar is also provided with shoulders D D', which limit the forward vibration of a peculiarly-formed shackle, E, which is connected to the bar by means of a pivot-bolt, F. The shackle E is armed with two jaws, G G', sep-

arated by a tapering interval, g.

Operation: A spike having been started in the usual way, (see Fig. 2,) the shackle E is

permitted to assume the position represented in Fig. 3, so as to afford a fulcrum of sufficient elevation to complete the extraction of the spike. For the extraction of spikes whose situation is on the outer and consequently inaccessible edge of a bridge or trestle, or in the narrow depression between a main and guide rail, the clevis E is allowed to drop until its jaws G G' engage the head of the spike, said jaws being thus made to perform the service of a claw. A continued depression of the bar brings into service the lesser spur C, (see Fig. 4,) and still further depression brings into service the larger spur C', (see Fig. 5,) which so elevates the effective fulcrum as to enable a complete extraction of the spike.

In situations where the sheep's foot cannot be conveniently applied for prying purposes the shackle may be made to take its place, as

in Fig. 6.

I claim herein as new and of my invention— 1. The bar A, in combination with the rib C' and shackle E F G, as and for the purposes set forth.

2. The combination of the shackle E F G gwith the shoulders D and bar A, when constructed and arranged to operate as explained.

In testimony of which invention I hereunto set my hand.

GEORGE BROWNELL.

Witnesses: GIDEON PUTNAM, E. S. DUYAL.