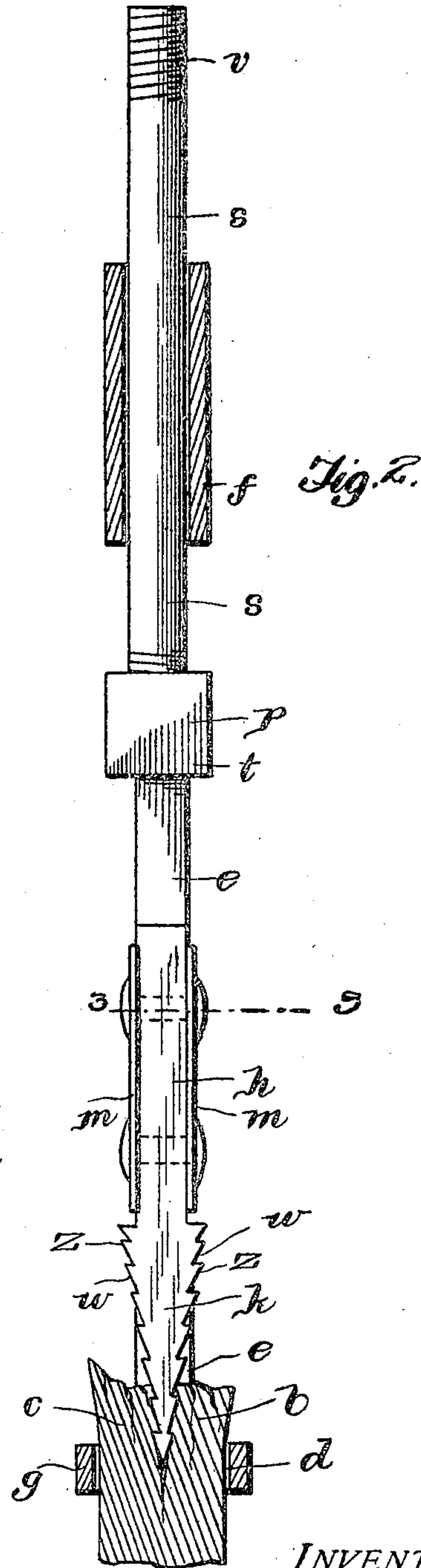
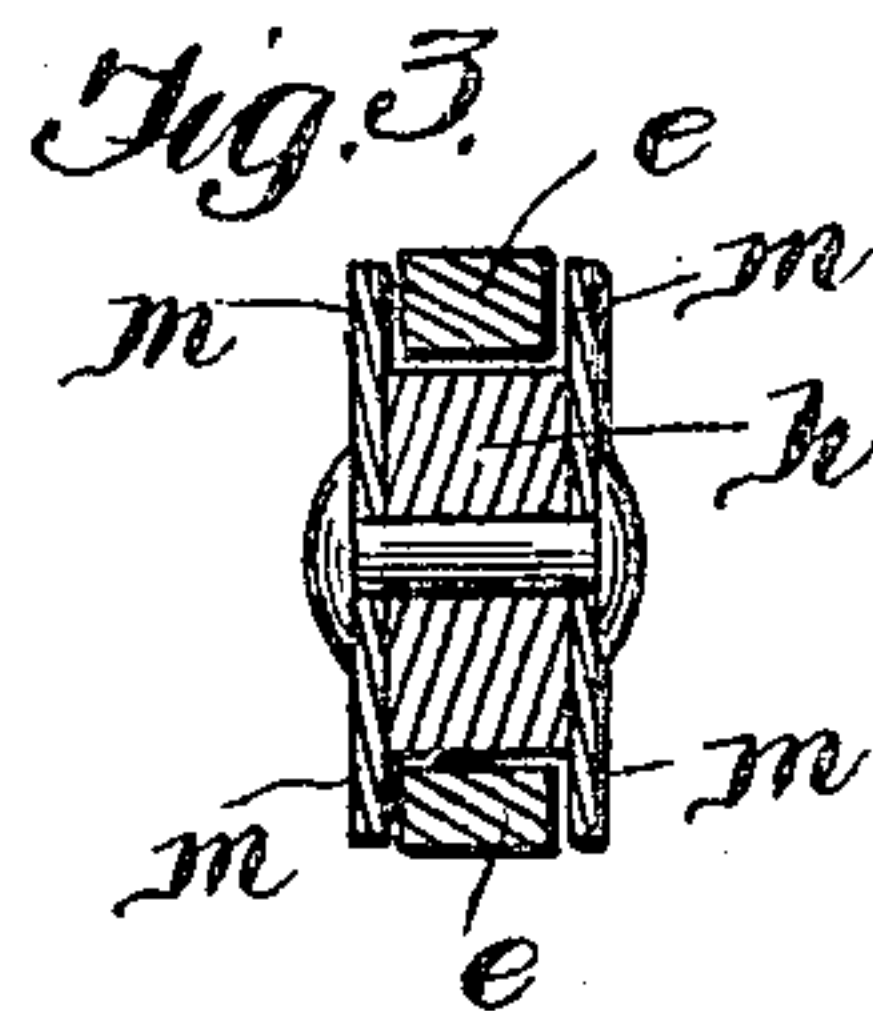
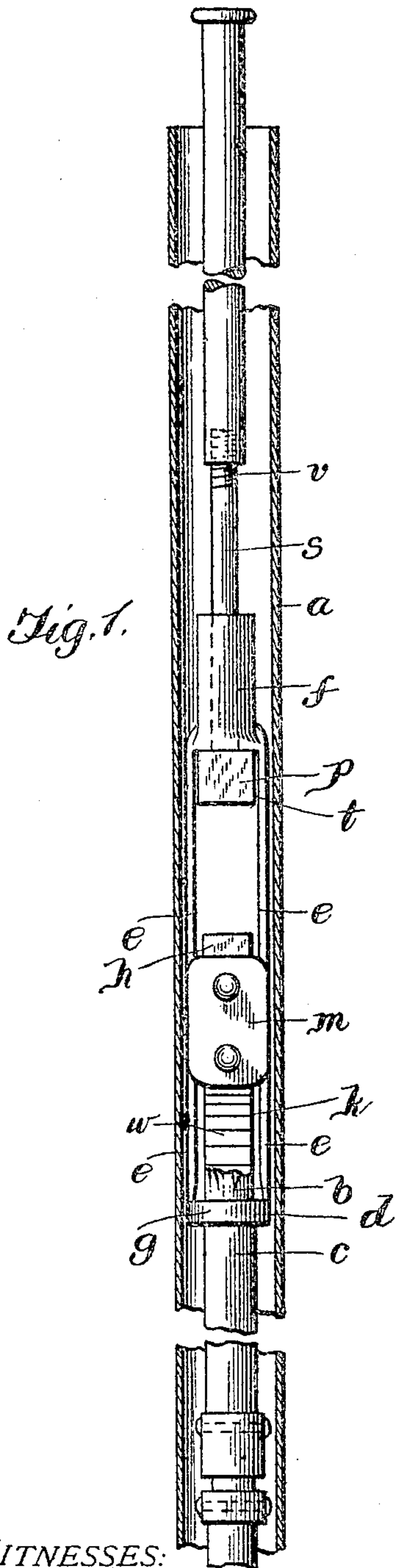


No. 801,134.

PATENTED OCT. 3, 1905.

S. S. BUTTON.
PUMP ROD EXTRACTOR.
APPLICATION FILED MAY 4, 1905.



WITNESSES:

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SAMUEL S. BUTTON, OF HODGEMAN, KANSAS.

PUMP-ROD EXTRACTOR.

No. 801,134.

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed May 4, 1905. Serial No. 258,789.

To all whom it may concern:

Be it known that I, SAMUEL S. BUTTON, a citizen of the United States, and a resident of Hodgeman, in the county of Hodgeman and State of Kansas, have made a certain new and useful Invention in Pump-Rod Extractors; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it ap-
10 pertains to make and use the invention, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of the invention as
15 applied. Fig. 2 is a side view of the invention from the opposite side. Fig. 3 is a section on the line 3 3, Fig. 2.

The invention has relation to means for extracting broken rods from tubular wells; and
20 it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, illustrating the invention, the letter *a* designates the tubular well or piping of a well, and *b* the broken
25 end of a rod therein. The upper portion of the rod (indicated at *c*) is connected to the extracting-tool by means of its coupling *d*. The rod is made of sections of wood which are connected together by means of screw-cou-
30 plings, which are secured to the wooden sections by rivets.

The extractor consists of a sliding serrated wedge between two parallel guide arms or
35 bars *e e*, connected together at their upper ends by a tubular guide portion *f* and at their lower ends by a ring portion *g* and forming a holder. Between the bars *e e* is the anvil-shank *h* of the wedge *k*, said anvil-shank fitting neatly between said bars, but sufficiently
40 loosely to allow of motion of reciprocation. To the anvil-shank are securely riveted the guide-plates *m m*, which extend laterally to embrace the bars *e e*. Between these bars and above the anvil-shank is the hammer-head *p*,
45 which is also designed to reciprocate. It is provided with broad lateral faces *t*, which are designed to be in loose contact with said bars, so that it is prevented from turning. It is also held in position above the anvil-shank by
50 its stem *s*, which is screwed into the head and

extends upward through the guide-tube *f*, which fits said stem neatly, but loosely. The upper end of the stem is threaded, as at *v*, for attachment to a rod-coupling. The wedge *k* integral with said anvil-shank has upward and
55 outward inclined sides *w*, which are provided with a succession of serrations, as indicated at *z*. In these serration-rabbets, which extend transversely, the long faces extend upward and outward, and the short faces or
60 shoulders are at right angles thereto. They lessen the friction of driving into the wood and aid in securing a purchase therein.

The wedge having been connected to the rod by means of the coupling is in condition for
65 use. The ring portion of the device having been caused to encircle the broken end of the rod in the well, the fact is made known by the raised position of the wedge, which is indicated through the wedge-shank, hammer, and
70 the rod-sections coupled thereto. As the rod-sections are coupled together, a shaft which is practically solid extends out of the top of the well and serves to receive the strokes of a
75 hammer, whereby the wedge is driven into the broken end of the rod in the well in such wise as to become securely connected therewith, so as to be easily withdrawn from the well.

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

An extractor for use in tubular wells, consisting of the parallel-bar holder, having an
85 upper end tubular guide a lower end ring and parallel guide-bars connecting said tubular guide and end ring, a reciprocatory serrated wedge having an anvil-shank, and guide-plates secured thereto, a reciprocatory hammer-head
90 above the anvil-shank, and a coupling-stem secured to the hammer-head and loosely engaging the tubular guide, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL S. BUTTON.

Witnesses:

CHARLES RUFF,

JOHN W. THOMPSON.