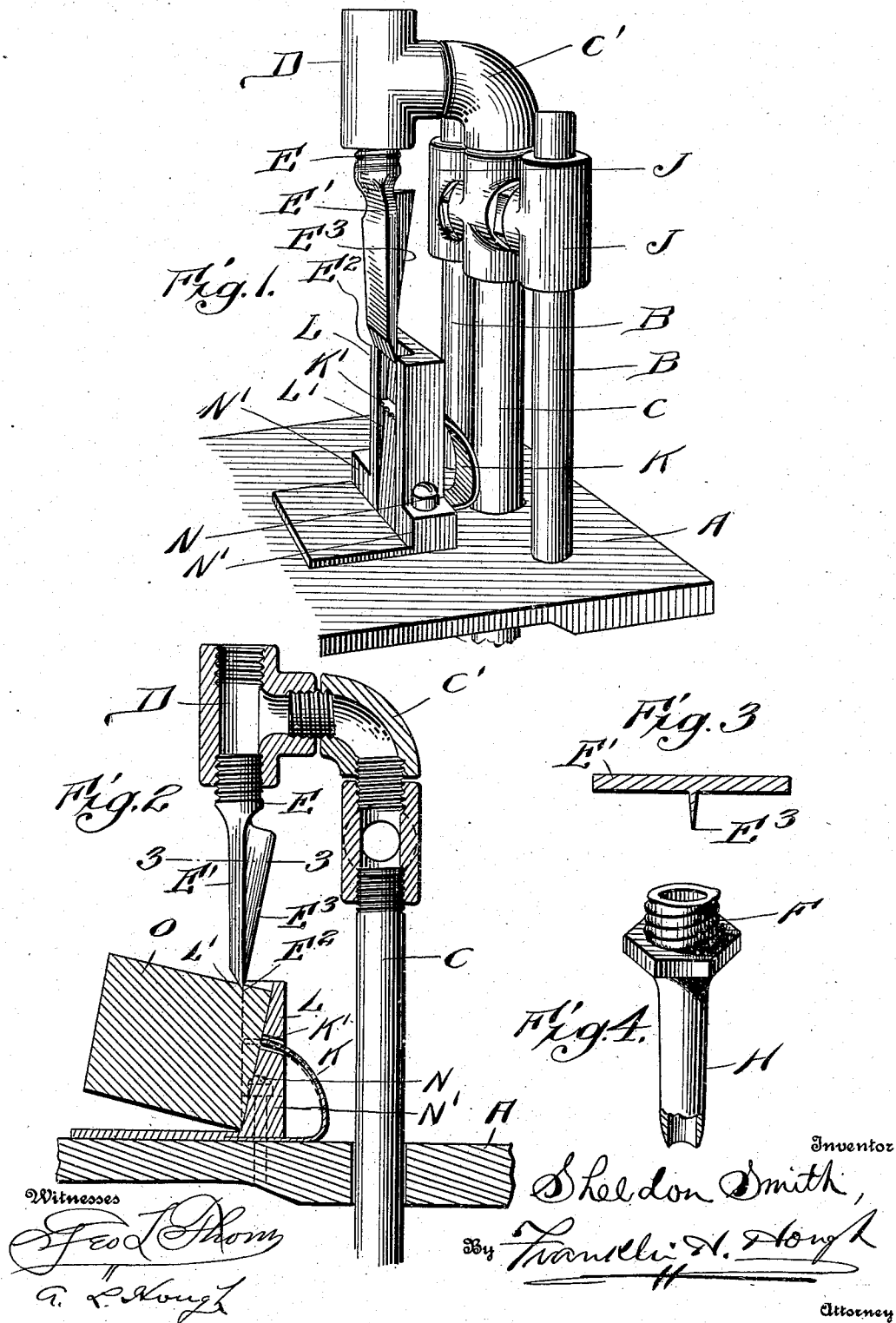


S. SMITH.
 APPARATUS FOR CUTTING WEDGE BLOCKS AND DOYLE PINS.
 APPLICATION FILED MAY 21, 1909.

936,744.

Patented Oct. 12, 1909.



UNITED STATES PATENT OFFICE.

SHELDON SMITH, OF WOODLAND, CALIFORNIA.

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936,744.

Specification of Letters Patent.

Patented Oct. 12, 1909.

Application filed May 21, 1909. Serial No. 497,539.

To all whom it may concern:

Be it known that I, SHELDON SMITH, a citizen of the United States, residing at Woodland, in the county of Yolo and State of California, have invented certain new and useful Improvements in Apparatus for Cutting Wedge-Blocks and Doyle-Pins; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for cutting wedge-shaped blocks and doyle pins and comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of my improved apparatus. Fig. 2 is a vertical sectional view through the apparatus showing the manner of ejecting the blocks after being cut, and Fig. 3 is a detail view of the cutting knife. Fig. 4 is a detail perspective view of a punch and adapted to be attached to the apparatus.

Reference now being had to the details of the drawings by letter, A designates the table of the apparatus which is suitably supported and rising from said table are the two parallel guide bars B and B and intermediate said bars is the reciprocating rod C having an elbow C' to which a T-shaped member D is fitted in any suitable manner, said member D being hollow and having a threaded wall for the reception of the threaded shank portion E of the knife or of the threaded shell F which is adapted to carry a cylindrical cutter H for cutting doyle pins. Said reciprocating rod C has T-shaped guide arms J projecting therefrom and through which the rods B pass for the purpose of guiding the rod C as the latter reciprocates by any suitable mechanism. Rising from said table is a standard L which has a recess L' upon one face thereof, the inner wall of said recess being inclined as shown. Said standard is held in place by any suitable means, such

as screws N which pass through the shouldered portion of the standard and engage the table. The lower portion of the standard, made preferably of metal, has a lateral extension N' upon which the block to be cut is adapted to rest.

K designates a spring, one end of which is serrated, as at K', and extends through a slot formed in the wall of the recess L'. Said spring is positioned intermediate the bar C and the rear face of the standard L and, when a block O to be cut is placed within said recess L' and forced against the end of the spring, the latter will yield and, after a wedge-shaped strip has been severed from the block O, said spring tends to throw the strip thus cut out of the recess in the standard L.

The cutting knife, designated by letter E', it will be noted is provided with two cutting edges, designated respectively by letters E² and E³, the former of which serves to cut a wedge-shaped strip from the block and the latter divides the wedge-shaped block into two sections as the knife is moved downward against the block and held underneath the same. When it is desired to utilize the circular cutter in place of the knife for cutting the wedge-shaped strips, said knife is removed from the head carrying the same and the threaded shell F with the cylindrical outlined cutter fastened thereto substituted in place therefor. When the apparatus is adjusted for cutting the doyle pins, the standard L and the spring may be readily removed from the table.

What I claim to be new is:—

1. In combination with a table, a vertical reciprocating rod passing therethrough, laterally projecting hollow T-shaped members projecting therefrom, fixed guide rods upon the table and passing through said T-shaped members, an elbow fixed to said reciprocating rod, a hollow threaded T-shaped shell fixed to said elbow, and a cutting knife having a threaded shank portion engaging said threaded T-shaped member.

2. In combination with a table, a vertical reciprocating rod passing therethrough, laterally projecting hollow T-shaped members projecting therefrom, fixed guide rods upon the table and passing through said T-shaped members, an elbow fixed to said reciprocating rod, a hollow threaded T-shaped shell fixed to said elbow, a cutting knife having a threaded shank portion engaging said

threaded T-shaped member, a standard
mounted upon said table and having a re-
cess in the face thereof, the wall of said re-
cess being inclined and adapted to receive a
5 block positioned underneath said cutting
knife.

3. In combination with a table, a vertical
reciprocating rod passing therethrough, lat-
erally projecting hollow T-shaped members
10 projecting therefrom, fixed guide rods upon
the table and passing through said T-shaped
members, an elbow fixed to said reciprocating
rod, a hollow threaded T-shaped shell
fixed to said elbow, a cutting knife having a
15 threaded shank portion engaging said
threaded T-shaped member, a standard
mounted upon said table and having a recess
in the face thereof, the wall of said recess
being inclined and adapted to receive a block
20 positioned underneath said cutting knife,
and a spring adapted to bear against a block
held within said recess.

4. In combination with a table, a vertical
reciprocating rod passing therethrough, lat-
25 erally projecting hollow T-shaped members
projecting therefrom, fixed guide rods upon
the table and passing through said T-shaped
members, an elbow fixed to said reciprocating
rod, a hollow threaded T-shaped shell
30 fixed to said elbow, a cutting knife having a
threaded shank portion engaging said
threaded T-shaped member, a standard
mounted upon said table and having a re-

cess in the face thereof; the wall of said re-
cess being inclined and adapted to receive 35
a block positioned underneath said cutting
knife, and a spring extending through the
inclined wall of said recess and having ser-
rations at the end thereof adapted to engage
a block held within the recess. 40

5. In combination with a table, a vertical
reciprocating rod passing therethrough, lat-
erally projecting hollow T-shaped members
projecting therefrom, fixed guide rods upon
the table and passing through said T-shaped 45
members, an elbow fixed to said reciprocating
rod, a hollow threaded T-shaped shell
fixed to said elbow, a cutting knife having a
threaded shank portion engaging said
threaded T-shaped member, a standard hav- 50
ing a recess in one face thereof, the wall of
said recess being inclined, the lower portion
of said standard having a laterally extend-
ing projection, means for fastening the
standard to the table, a spring passing 55
through said inclined wall of the recess and
having teeth designed to yieldingly engage a
block held within the recess and resting
upon said projection.

In testimony whereof I hereunto affix my 60
signature in the presence of two witnesses.

SHELDON SMITH.

Witnesses:

G. P. HURST,
J. N. LUKINS.