

D. H. HATLEE.
Horseshoe-Machine.

No. 217,614.

Patented July 15, 1879.

Fig. 1

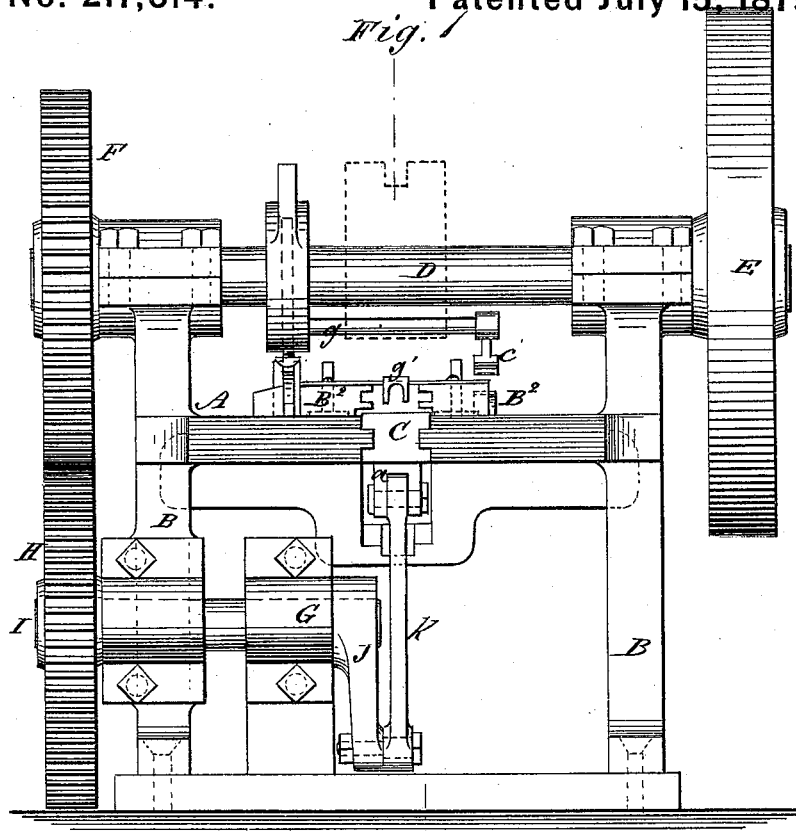
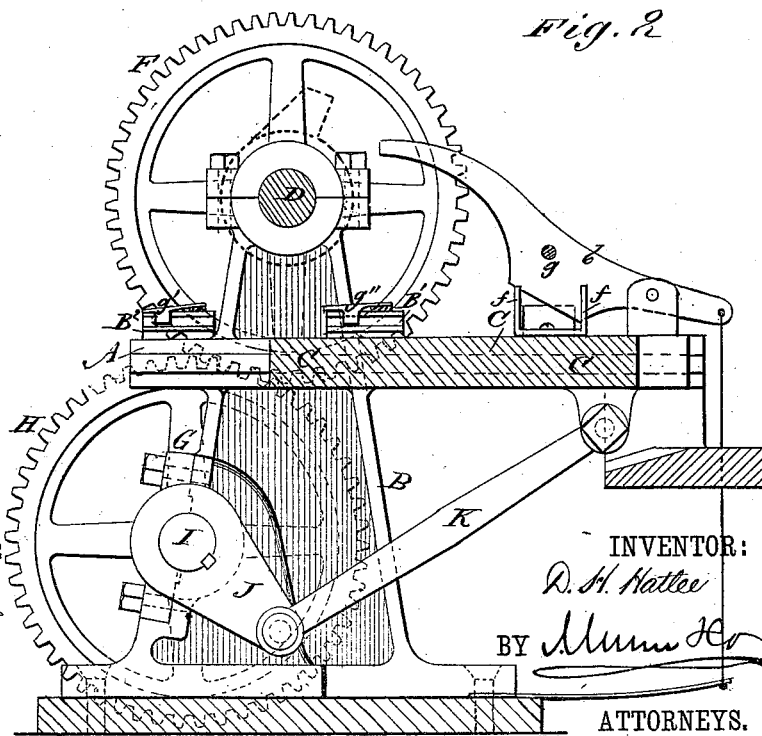


Fig. 2



WITNESSES:

C. Neveu
E. Sedgwick

INVENTOR:

D. H. Hatlee

BY

M. H. Hatlee

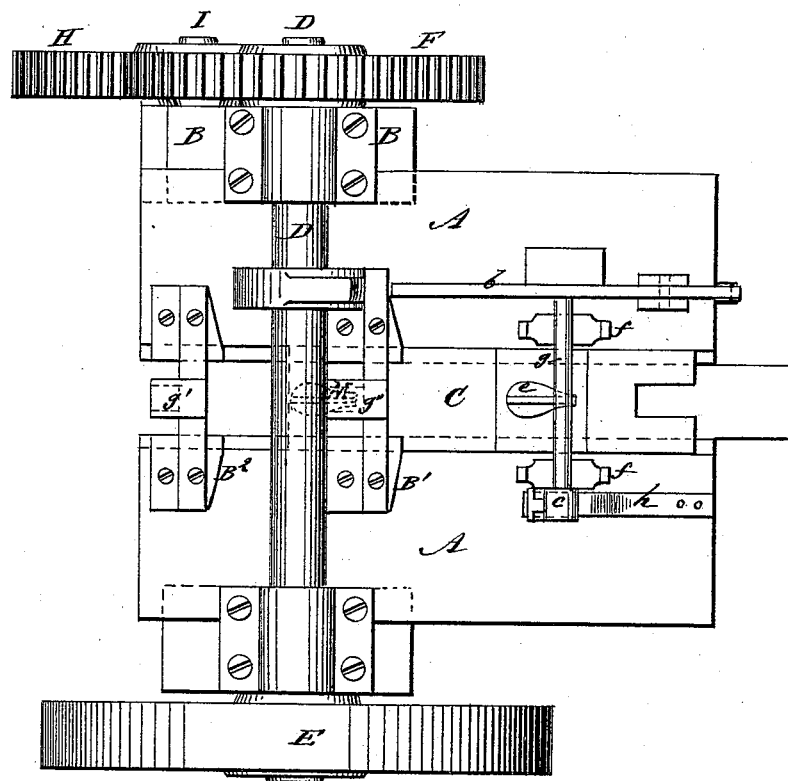
ATTORNEYS.

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Fig. 3



WITNESSES:

C. Veroux
C. Sedgwick

INVENTOR:

D. H. Hatlee

BY

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

DAVID H. HATLEE, OF CLIFTON PARK, NEW YORK.

IMPROVEMENT IN HORSESHOE-MACHINES.

Specification forming part of Letters Patent No. **217,614**, dated July 15, 1879; application filed December 7, 1878.

To all whom it may concern:

Be it known that I, DAVID H. HATLEE, of Clifton Park, in the county of Saratoga and State of New York, have invented a new and useful Improvement in Machines for Making Horseshoes, of which the following is a specification.

In Letters Patent granted to me August 6, 1878, No. 206,726, a machine for making horseshoes is described, which machine has a horizontal bed that has a movable portion and carries dies, around which the shoe is formed, as more fully described in the said Letters Patent.

In the accompanying drawings, Figure 1 is an end elevation of the machine showing my improvements. Fig. 2 is a sectional side elevation. Fig. 3 is a plan view.

Similar letters of reference indicate corresponding parts.

A is the bed of the machine, which is supported on standards B, and is slotted through the center its entire length, and provided with tongues for guiding the movable bed C, which is shorter than stationary bed A. The bed A is to carry dies, around which the shoe is formed (from a bar of suitable length) by means of devices attached to the fixed portion of the bed or frame, all of said devices being connected with and operated by the movable part of the bed, as described in the Letters Patent aforesaid.

In the upper part of the standard B a shaft, D, is journaled, which projects beyond the standards at each side of the machine.

Upon one end of shaft D is placed a fly-wheel, E, and upon the other end is a gear-wheel, F, which meshes with a similar gear-wheel, H, on shaft I, that is journaled in a box, G, on the lower part of one standard, B. The shaft I has secured upon its inner end a crank-arm, J, that is connected by rod *k* to a lug, *a*, on the under side of movable bed C, and gives to said bed a longitudinal reciprocating motion.

The dies for creasing the bottom of the shoe will be clamped in an arm that is secured to shaft D above bed C. The motion of the arm must be in harmony with the dies that form the shoes, which are carried by bed C, and by

the described connections uniformity and harmony of motion are obtained.

The bar from which the shoe is made is cut off by a fixed and moving shear-blade operated at suitable intervals. The bar is moved forward until it touches the gage. The moving shear *b* carries an arm, *g*, upon the end of which is a foot-piece, *c*, that presses upon the bar of iron, and holds it before the die *e* on bed C, and the spring-tongue *h*, upon which the bar runs, prevents the bar from turning over after it is cut off. The rod that is cut off is held against the action of the die by stops *f f*, one near the shear and the other near the foot-piece *c*, until it is partly bent and carried out by the die to the formers. (Not shown.)

The forward movement of bed C carries the shoe to the holders B', whose beveled edges raise it from the bed C, and the shoe is retained in the holders B' during the retrograde movement of bed C, when it is taken by the forward die and carried forward to the creasers in the same manner, as described in said patent.

To prevent the shoe from coming back during the retrograde movement of bed C, I attach to the holders B' spring-guides *g*, having projecting points, which are raised by the toe-piece of the shoe as it goes forward and spring down behind the toe-piece, thus preventing the return of the shoe back, and also guiding it to die M, as that die comes between holders B' during the retrograde movement of bed C.

A similar spring-detent, *g*¹, is connected to the holders B'', that prevents the return of the finished shoe with the die M during its backward movement.

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

The combination, with the shear-blades and reciprocating die, of the shear-lever *b*, the stops *f f*, the arm *g*, the presser-foot *c*, and the spring-tongue *h*, as and for the purpose specified.

DAVID HENRY HATLEE.

Witnesses:

HENRY CLARK,
ABIJAH C. PECK.