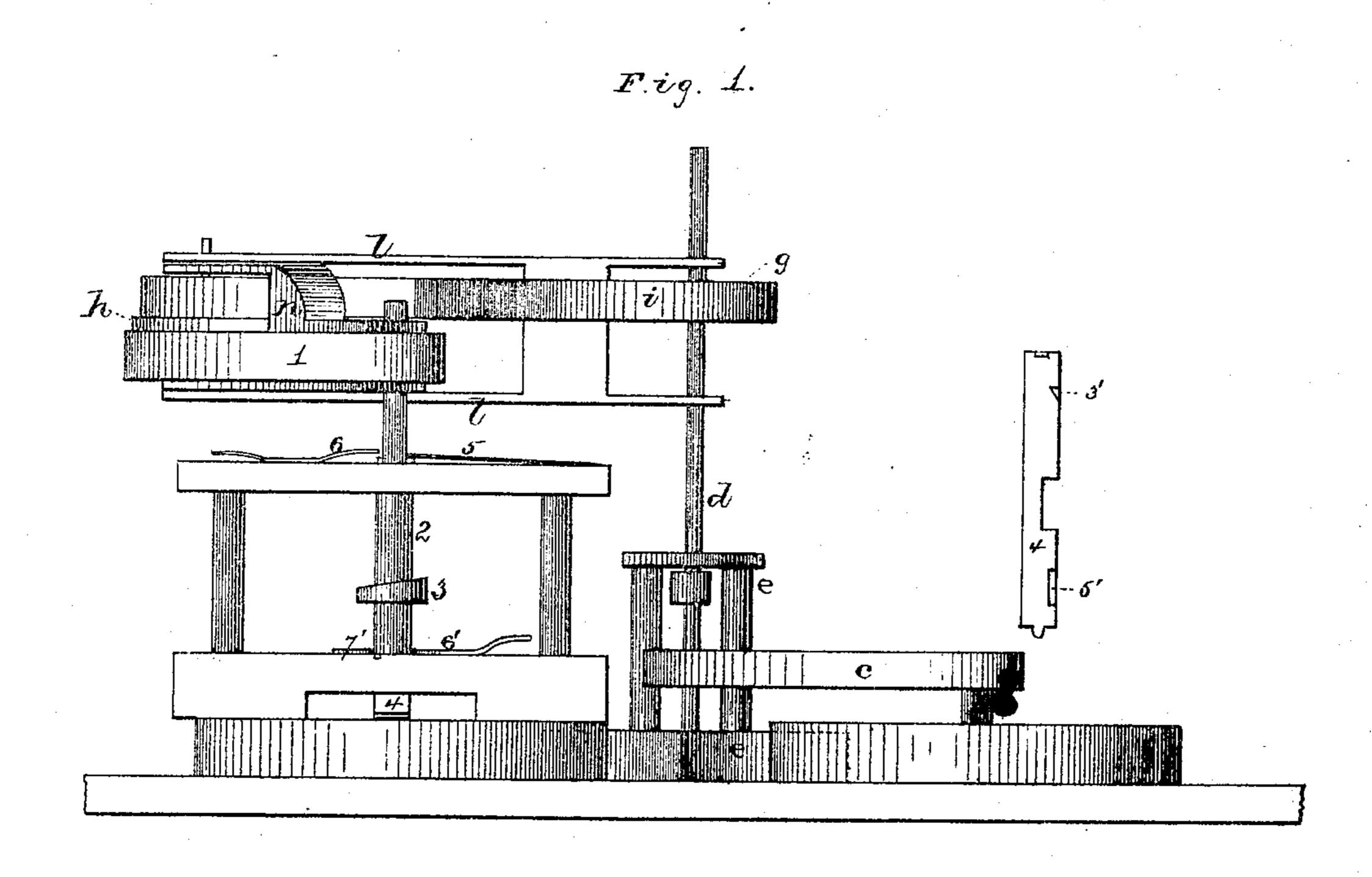
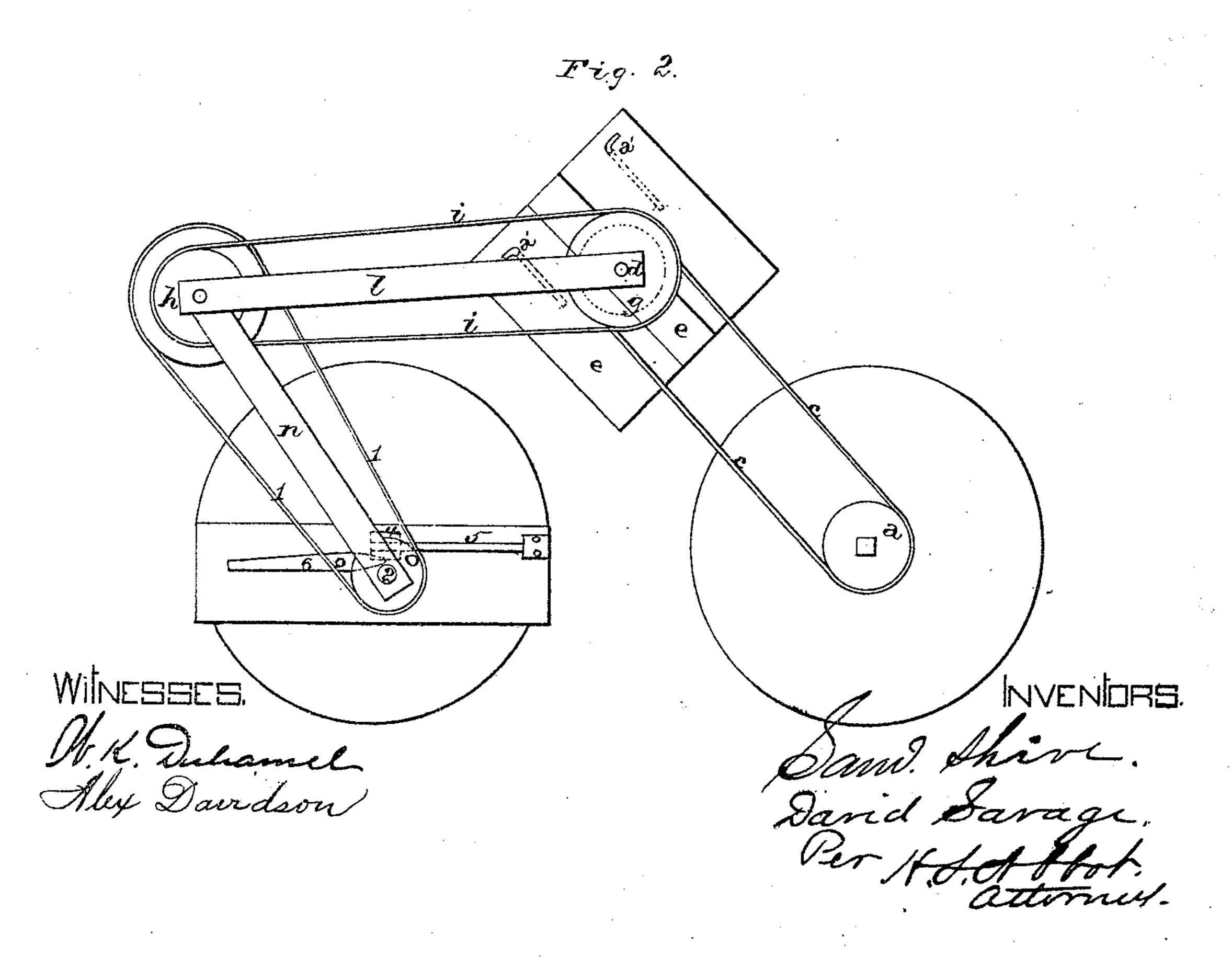
## S. SHIVE & D. SAVAGE. Machines for Dressing Mill-Stones.

No. 141,392.

Patented July 29, 1873.





## UNITED STATES PATENT OFFICE.

SAMUEL SHIVE, OF FORKS, AND DAVID SAVAGE, OF ORANGEVILLE, PA.; SAID SAVAGE ASSIGNOR OF ONE-THIRD HIS RIGHT TO SAID SHIVE.

## IMPROVEMENT IN MACHINES FOR DRESSING MILLSTONES.

Specification forming part of Letters Patent No. 141,392, dated July 29, 1873; application filed June 3, 1873.

To all whom it may concern:

Be it known that we, SAMUEL SHIVE, of Forks, and DAVID SAVAGE, of Orangeville, county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Machines for Dressing Millstones, of which the following is a specification:

The nature of our invention relates to an improvement in machines for dressing mill-stones; and it consists in the arrangement and combination of parts, which will be more fully described hereafter.

The accompanying drawings represent our invention.

In using our machine for dressing the bedstone, the runner-stone is taken off, and the pulley a, having a square opening through its center, is placed upon the mill-spindle b. Around this fully passes the belt c, which gives motion to the vertical shaft d in the frame e. This frame is secured to the floor by two pins, a', set at an angle, so that the belt, pulling upon the pulley on the shaft, will fasten it to the floor. Upon the upper end of the shaft d is secured, by means of a set-screw, the removable pulley g, around which a belt, i, passes, and which gives motion to the double pulley h placed in the ends of the arms l, pivoted at their opposite ends to the shaft d. Pivoted with the double pulley, to the outer ends of the arms l, is a second arm, n, carrying the swiveled pulley o, around which the belt 1 passes and gives motion to the shaft 2, having the cam 3 secured to it for operating the pick 4. The pick may be of any suitable kind, and has a spring, 5, bearing upon its top, so as to give force to its blows, the force being regulated by a lever, 6', or any other suitable device. When it is desired to keep the pick up from the stone a suitable catch or stop, 6, can

be made to catch in a recess, 3', formed in the side of the pick for that purpose. In order to prevent the pick from falling out of its frame a notch, 5', is cut in its edge near the bottom, in which a small pivoted bar, 7', catches and retains it in position. By means of the pivoted arms and swiveled pulley the pick can be swung freely around in every direction, and in every position. When one side of the bed-stone is dressed the frame is loosened from the floor and moved around to the opposite side of the stone, and the other part finished.

When it is desired to dress the runner-stone it is laid bottom side up beside the bed-stone, and the movable pulley on the shaft d is moved upward, carrying the arms and pick with it, until the pick rests upon the top of the stone.

The spindle may be operated by either steam or hydraulic power, as may be desired.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The frame e, secured to the floor by means of the pins a', and carrying the operating-shaft for communicating motion to the pick, substantially as set forth.

2. The pick 4, constructed as described, in combination with the spring 5, levers 6 6, and catch 7, substantially as shown and described.

3. The combination of the frame e, shaft d, arms l n, cam-shaft 2, picks 4, and the connecting belts and pulleys, substantially as shown and described.

In testimony that we claim the foregoing as our invention we hereunto affix our signatures.

SAMUEL SHIVE. DAVID SAVAGE.

Witnesses:
BOYD HENRIE,
JAMES B. HAMAN.