

W. Gregor,

Cutting Shingles,

No 19,293,

Patented Feb. 9, 1858.

Fig 1.

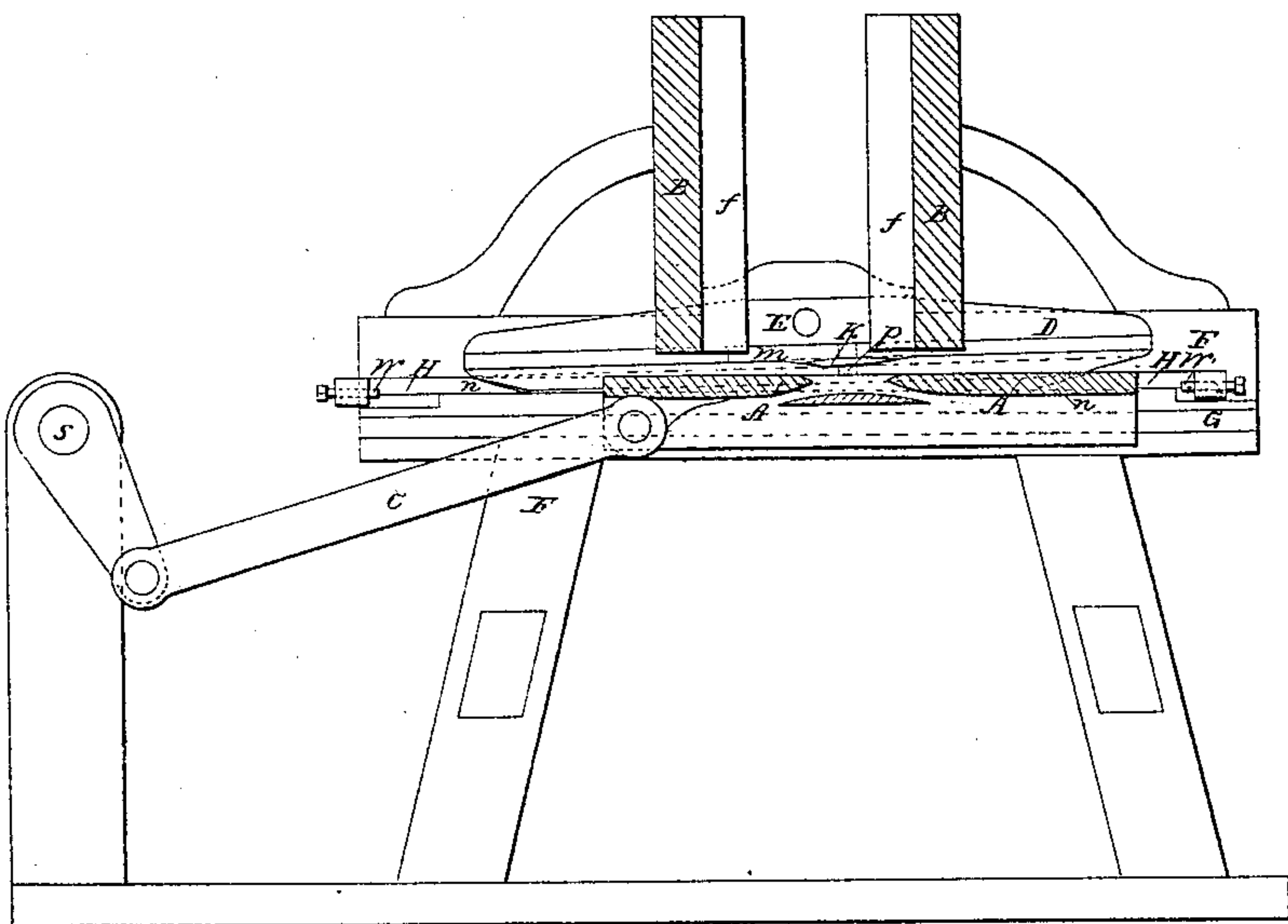


Fig 2.

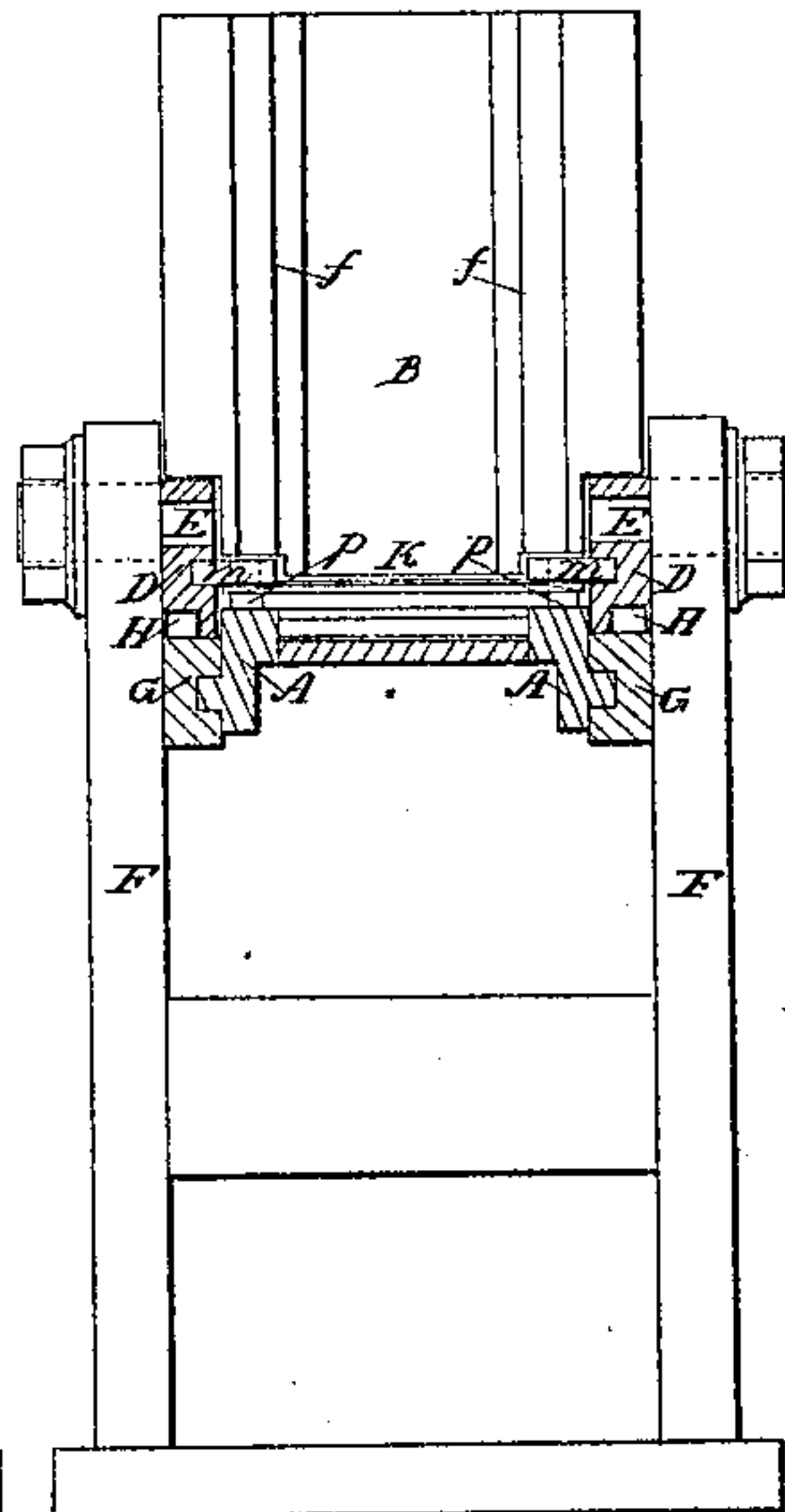
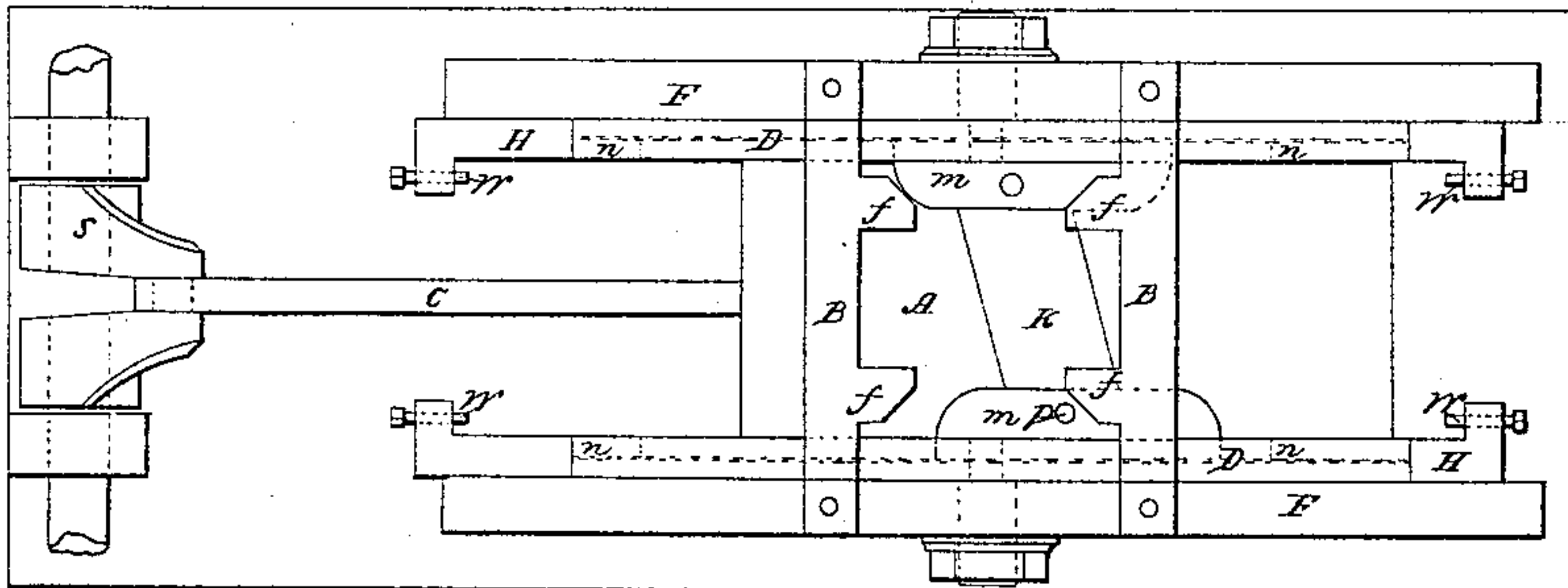


Fig 3.



UNITED STATES PATENT OFFICE.

W. GREGOR, OF NEW YORK, N. Y.

SHINGLE-MACHINE.

Specification of Letters Patent No. 19,293, dated February 9, 1858.

To all whom it may concern:

Be it known that I, WILLIAM GREGOR, of New York, in the county and State of New York, have invented a new and Improved Shingle-Machine; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents a longitudinal—, Fig. II, a cross-section, and Fig. III a top view, of the machine.

The bed plate, A, runs in guides G, G, attached to the frame, F, of the machine, and receives a forward and backward motion from the crankshaft, S, connected with the same through the connecting rod, C. Near the center of the bedplate, A, a double-edged knife, K, is attached to the same by means of the pins, *p*, *p*, but in such a manner as to allow said knife an up and down as well as an inclined motion forward or backward as may be desired.

B, B, are plates firmly attached to the frame of the machine, and provided with projecting ribs or flanches, *f*, forming a square hopper to receive the shingle bolt, which latter is forced down upon the bedplate, to allow the knife, at each backward and forward motion, to cut off a shingle in the manner hereafter described.

D, D are two slides, in which the projections, *m*, *m*, of the knife K are fitted and move, and by which said knife can be raised or lowered, and put at any angle with the surface of the bedplate which may be desired. The slides D, D, turn upon pins, E, E, which latter can be moved up and down, so as to bring the slides, D, and consequently the knife K nearer to or farther from the surface of the bedplate A, by which arrangement the thickness of the shingle will be regulated.

H, H are two rods provided with inclined surfaces, *n*, *n'*, at each end, by which the ends of the slides D, D, are alternately raised up, and kept in an inclined position with the surface of the bedplate during the whole motion of said bedplate, in consequence of which the knife, K, while being moved along by the bedplate, A, will be raised upward and move in the inclined position into which

the slides D, D, have been moved, by the action of the surfaces *n*, *n'*. At the ends of the rods, H, setscrews W, W', are attached, against which the ends of the bedplate come, near the end of its motion, moving thereby said rods H, so as to force the surfaces, *n* or *n'*, under the ends of the slides, D, to bring the same into the required position. Beneath the knife, K, an opening is made in the bedplate A to allow the cutoff shingles to fall through.

When the bedplate, A, is moved backward toward the crankshaft, S, the back end of the same comes against the set-screws, W, in the rods H, and moves thereby said rods back, so as to push the inclined surfaces, *n'*, under the forward ends of the slides, D, thereby bringing the same into an inclined position to the surface of the bedplate and equal to the bevel the shingle requires to be cut off. When the bedplate A is moved forward, the knife, K, which is attached to the same through the pins, *p*, *p*, will be forced forward, cutting in its passage a shingle of the block at a bevel corresponding to the inclination, which has been given to the slides, D, and which said inclination has been communicated to the knife, K, as the same is guided and moves in those slides, D. When the shingle has been cut off, the forward end of the bedplate comes in contact with the setscrews, W', moving thereby the rods H forward so as to bring the inclined surfaces, *n*, under the after ends of the slides D, thereby reversing the inclination of said slide, and consequently of the knife, K, which is now brought in the position to cut off a shingle having the desired bevel, in the backward motion of the bedplate. By moving the inclined surfaces, *n* or *n'*, more or less under the ends of the slides D, any desired bevel may be given to the shingles, and which can be regulated by the position of the setscrews W, W'.

By the above it will be perceived that not only will a shingle be cut off by each motion of the knife backward as well as forward, but at the same time a saving of wood will be obtained.

What I claim as my invention and desire to secure by Letters Patent is—

1. The arrangement of two slides, turn-

ing upon centers, and acted upon by inclined surfaces, which latter are operated by the motion of the bedplate as described.

2. I further claim the attachment of a
5 double edged knife to the bedplate in the manner described, moving back and forth with said bedplate, and at the same time

being acted upon by the above mentioned slides in the manner and for the purpose as set forth.

WILLIAM GREGOR.

Witnesses:

W. S. COURTNEY,
HENRY E. ROEDER.