

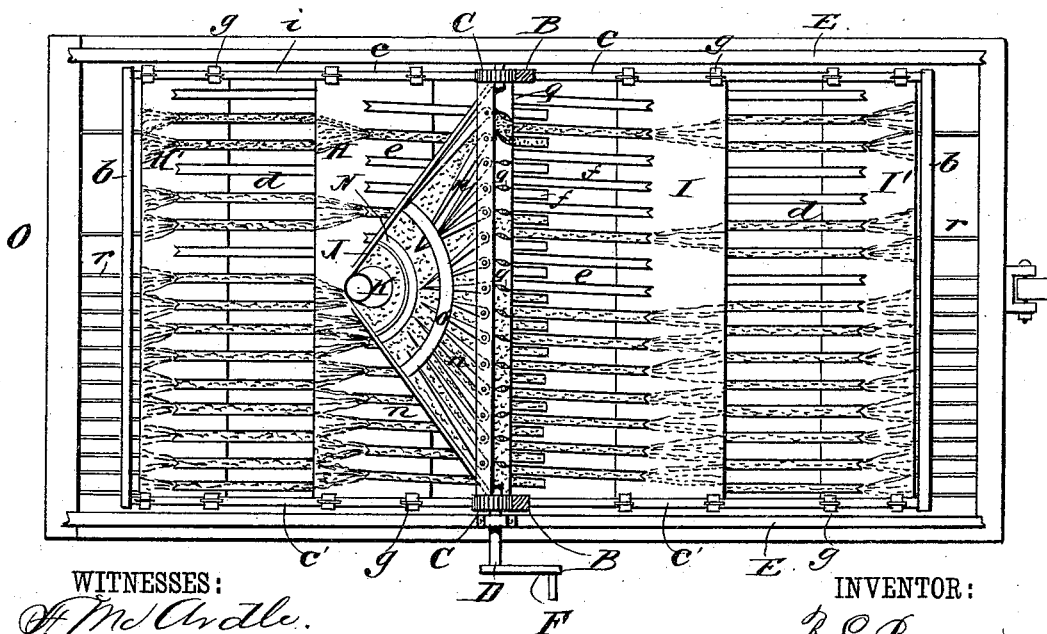
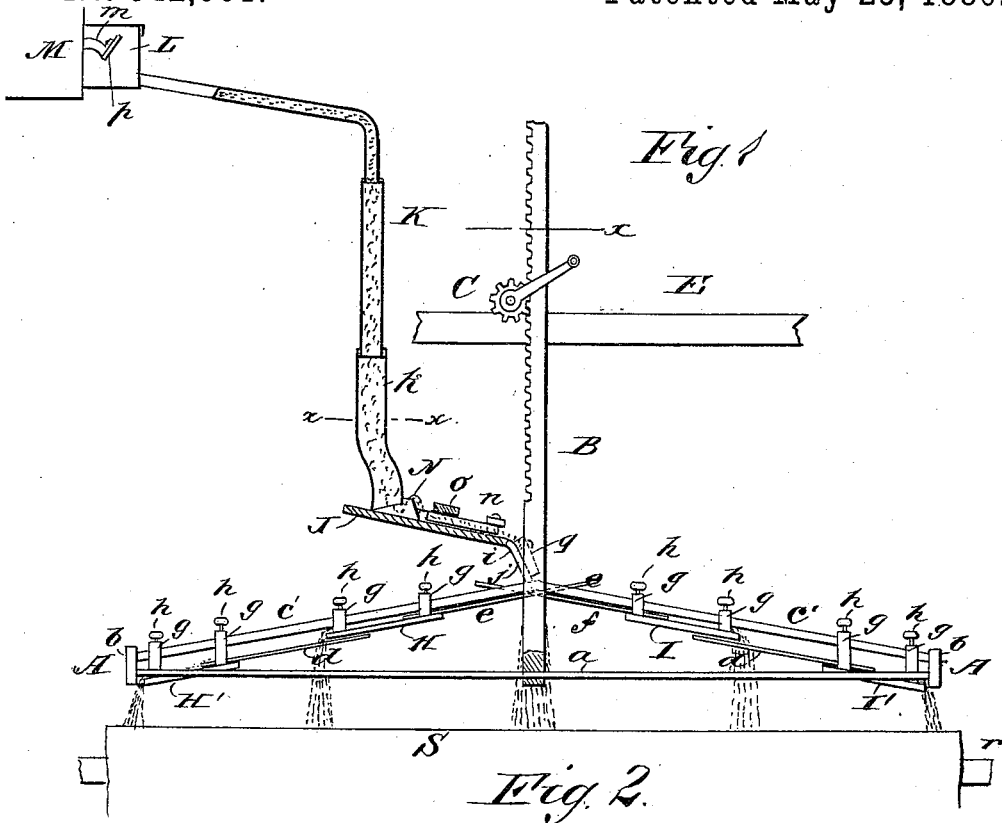
(No Model.)

R. L. BARNEY.

SAND FEEDING MECHANISM FOR STONE SAWING MACHINES.

No. 342,561.

Patented May 25, 1886.



WITNESSES:

H. Mc Ardle.  
C. Sedgwick

INVENTOR:

R. L. Barney  
BY *Munn & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

R. LESTER BARNEY, OF SWANTON, VERMONT.

## SAND-FEEDING MECHANISM FOR STONE-SAWING MACHINES.

SPECIFICATION forming part of Letters Patent No. 342,561, dated May 25, 1886.

Application filed December 12, 1885. Serial No. 185,480. (No model.)

*To all whom it may concern:*

Be it known that I, R. LESTER BARNEY, of Swanton, in the county of Franklin and State of Vermont, have invented a new and Improved Feed-Distributing Apparatus for Stone-Sawing Machines, of which the following is a full, clear, and exact description.

My invention relates to the construction of an apparatus for feeding water, combined with sand or any other operating agent, to the saws of a stone-sawing machine, the object of the invention being to provide an apparatus where-with the sand may be fed to any portion of the stone in a manner so that in striking upon the surface it will not spatter over the surrounding machinery; and the invention consists of adjustable boards, troughs, and switches or diverters, all constructed and arranged as will be hereinafter described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of my improved distributing apparatus, which is shown in partial section to disclose the construction of the parts; and Fig. 2 is a plan view of the apparatus, taken on line *xx* of Fig. 1.

In the construction illustrated in the drawings, *A A* represent the frame-work by which the several parts of the apparatus are supported. This frame consists of the end bars, *bb*, which are united by iron pipes *aa*, whereby a rectangular frame is formed. Another set of iron pipes, *c c'*, project upward and inward from each end of both of the end bars, *b*, the pipes *c* and *c'* meeting above the centers of the pipes *a*, where they are joined in any manner desired. The frame-work so formed is provided with two vertical racks, *B B*, which are engaged by pinions *C C*, carried by a shaft, *D*, that is mounted in bearings fixed to timbers *E E*, the shaft *D* being provided with a crank-arm, *F*, in order that the shaft may be rotated and the frame *A* elevated or depressed, in accordance with the thickness of the stone to be operated upon.

Each set of pipes *c c'* carries two boards, *H H'* and *I I'*, said boards extending across

the frame-work, as shown in Fig. 2, and being connected to the pipes *c c'* by hanger-arms *g g*, in which there are set-screws *h h*, so that the boards may be adjusted to the frame, the racks *B* being fixed in the position to which they are moved by simply turning the set-screws *h*. The boards *H'* and *I'* carry troughs or leaders *d d*, which extend upward and beneath the boards *H* and *I*, said leaders being secured to the upper face of the boards *H'* and *I'*. The boards *H* and *I* carry leaders *e* and *f*, which are secured to their upper faces, and arranged so that the leaders *e* pass through the spaces between the leaders *f*, and vice versa.

A triangular apron, *J*, extends upward from the apex of the frame *A*, as shown best in Fig. 1, the said apron being bent backward at the point *i*, so that its upper portion is only slightly inclined, while its lower part is almost vertical. A number of diverters or switches, *n n*, are pivotally connected to the apron *J*, just above the bend *i*, said diverters being of varying length, as shown, so that they may be folded together and a preponderance of the sand or feed led to either side of the gang, or may be fed to any one or more of the saws, as desired. The points of these switches are held in place by a curved bar, *o*, and the feed is led to the apron *J* through a telescopically-jointed pipe, *K*, which leads upward to a distributing-reservoir, *L*, that is fed from the main reservoir *M* through a pipe, *m*, in which there is a stop-cock, *p*, the idea being to provide a means for regulating the amount of feed to be distributed upon the stone. The lower joint, *k*, of the pipe *K* is fixed to the apron *J*, there being of course an opening at the lower end of the joint; but in order that the rush of feed from the pipe *K* may be somewhat checked before passing down over the apron *J*, I surround the open side of the pipe by a semicircular dam, *N*. Upon the steep portion *j* of the apron *J*, I arrange a second system of diverters, as shown at *q*, said diverters being pointed strips of wood or metal, which are centrally connected to the apron, so that they may be turned upon their connecting-bolts to guide the feed into such of the leaders or troughs *e f* as may be required.

Such an apparatus as has been described is mounted above the gang-frame O, in which there are, as usual, arranged the saws *r r*, it being understood that the stone is placed substantially in the position shown at S in Fig. 1.

In operation the frame A is depressed so as to be close upon the stone S, and the various systems of diverters adjusted to distribute the feed, as required, it being understood that a lateral adjustment of the feed is obtained by the adjustment of the diverters, while to obtain a longitudinal adjustment thereof the boards H H' and I I' are moved to or from the apex of the frame A.

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

1. The combination, with a feed-supplying apparatus, of a supporting-frame carrying adjustably-mounted boards which are provided with leaders, the leaders of the lower boards extending upward beneath the upper boards, substantially as described.

2. The combination, with a feed-supplying apparatus, of a frame, as A, having inclined pipes *c c'*, upon which there are adjustably-mounted boards, as H H' and I I', supported by hanger-brackets *g g*, leaders *d*, carried by

the boards H' and I', and interlocking leaders *e* and *f*, carried by the boards H and I, substantially as described.

3. In a sand-distributing apparatus, the combination, with the feed-supply pipe, of an apron carrying diverters, and adjustable boards carrying leaders arranged below the apron, substantially as described.

4. In a sand-distributing apparatus, the combination, with a telescopically-jointed feed-supply pipe, of an apron carried by an adjustable frame, and formed with a dam, N, diverters *o q*, carried by the apron below the dam, boards H H' and I I', carried by the adjustable frame, and leaders carried by the boards H H' and I I', the leaders of the boards H' and I' extending upward beneath the boards H and I, respectively, substantially as described.

5. The combination, with a vertically-adjustable frame carrying an apron provided with diverters and adjustable boards carrying leaders, of a telescopically-jointed feed-pipe, substantially as described.

R. LESTER BARNEY.

Witnesses:

SIDNEY S. MOREY,  
JOHN H. BARNEY.