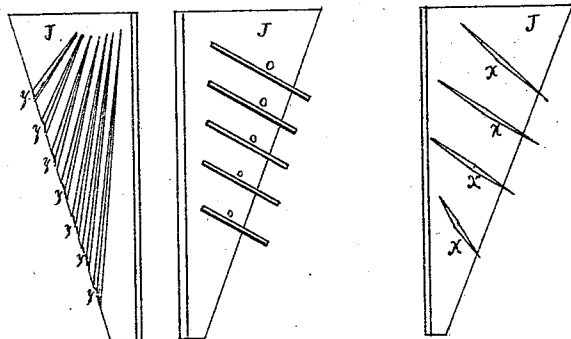
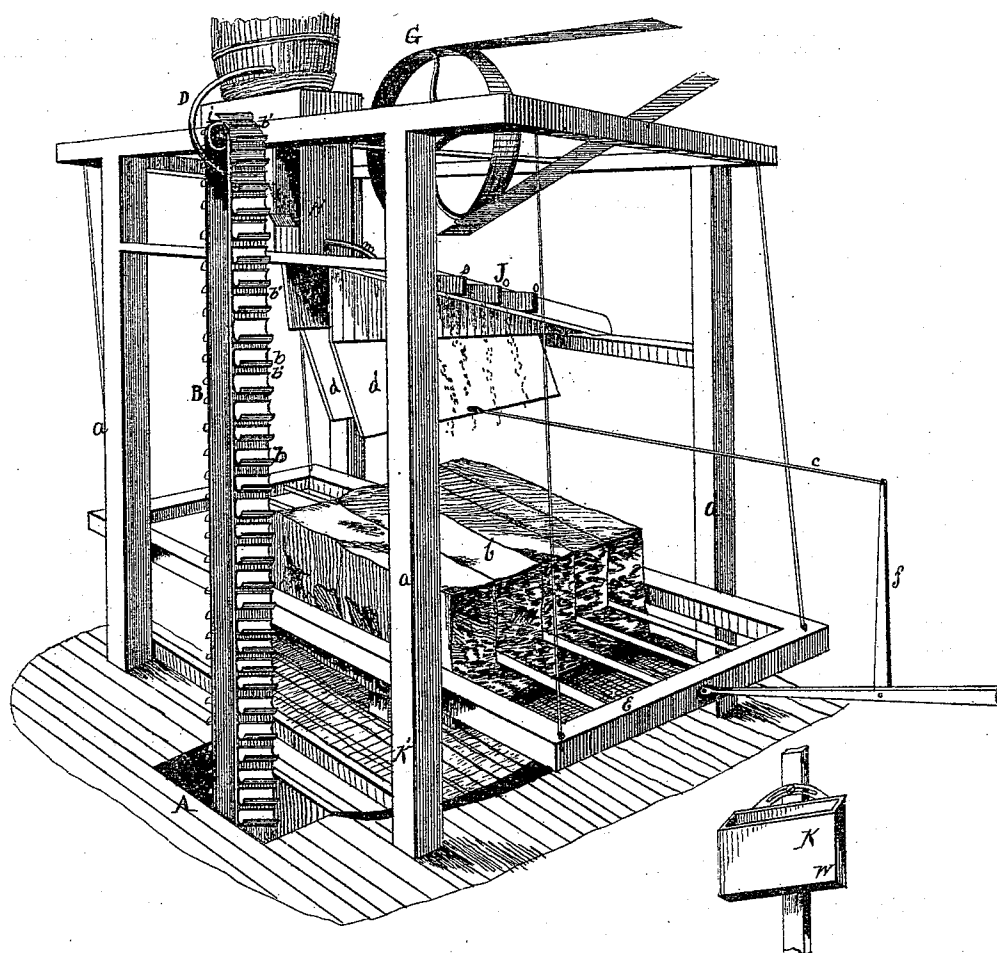


V. G. BARNEY.
Machine for Sawing Stone.

No. 123,217.

Patented Jan. 30, 1872.



Witnesses:
Chas. H. Woods
Geo. W. Chowen

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UNITED STATES PATENT OFFICE.

VALENTINE G. BARNEY, OF MINNEAPOLIS, MINNESOTA.

IMPROVEMENT IN MACHINES FOR SAWING STONE.

Specification forming part of Letters Patent No. 123,217, dated January 30, 1872.

Specification describing Improvements in Machinery for Sawing Marble, invented by VALENTINE G. BARNEY, of Minneapolis, Minnesota.

My invention relates to the construction and combination of certain devices for feeding sand and water mixture upon a block of marble while being sawed, my object being to accomplish by mechanical power work hitherto done by hand labor.

In the accompanying drawing which makes a part of this specification, *a a a* represent the frame of the machine, within which the block *b* is laid, and from which swings the gang *E*. *A* shows the position of the tank, which holds several gallons of sand and water. Across and within this tank is set a pulley, upon which, with another pulley at *i* on the end of wheel-shaft *G*, runs the conveyer *B*. This conveyer consists of heavy belting, to which are attached metallic buckets *b*, as shown. These buckets *b* are open at each end, and the upper rim *b'* of each bent inward, so that there can be no drip from one bucket into another, but all the drip shall run down on the belt to the tank. When the conveyer is set in slow motion by the wheel *G* the buckets *b*, filled with wet sand from *A*, rise and pass successively before the orifice of pipe *D*, from which a stream or jet of water is delivered with force sufficient to carry with it the sand from the buckets into the receiver *H*, on opposite sides of which are discharge-pipes *m m*, which conduct the mixture onto the distributor *J*, which consists of an inclined plane having distributing devices, which are hereinafter described. This distributor is constructed in two parts or sections, one for each pipe leading from *H*, and these sections are tapering in width from the upper to the lower end. As the mixture flows down and off from the plane it meets devices attached both on the upper surface and also underneath, which accomplish its distribution over the block. These devices on the upper surface may consist of grooves *y y y*, or slides *o o o*, or buttons *x x x*. The grooves, as will be seen, are of different lengths, the shorter ones delivering the mixture from the

upper and wider part of the plane and the longer ones from the lower and narrower part. When slides *o o o* are employed they can be regulated at different distances from the interior side of *J* so that each slide shall throw off some portion of the mixture as it flows down the plane; or, if buttons are used, *x x x*, these may be turned to regulate the flow on different parts of the block. In order, also, that the mixture may be thrown lengthwise, the block devices, consisting of leaves *d d*, are hung underneath *J*, which leaves are swung when the gang is in motion by means of the rod and arm *C f*. Grooves also are sunk in the platform under the block, which conducts the mixture back again to tank *A*, where the fine particles of worn-out sand will overflow and run off with the waste water, while the good sand settles and is taken up again by the buckets, the waste being constantly supplied by fresh sand from *K*, which is a sand-feeder attached to the frame at *K'*, and which consists of an oblong box of suitable size, with the bottom sloping backward and also downward toward the tank. Into this box a seam is opened along the front side and lower end, through which the sand is fed into the tank by means of a stream of water let on at *W*.

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

1. The elevator or conveyer *B* having buckets *b* open at both ends and rims *b'* thereon, in the manner and for the purpose described.
2. The inclined distributor *J*, with grooves *y y*, or adjustable slides *o o*, or buttons *x x*, in combination with the swinging levers *d d*, substantially as shown and described.
3. The combination of the tank *A*, conveyer *B*, having buckets open at each end, with the jet-pipes *D*, receiver *H*, and distributor *J*, constructed and operating substantially as shown.
4. The sand-feeder *K*, constructed as described, in combination with the tank *A*, in the manner shown and described.

VALENTINE G. BARNEY.

In presence of—

GEO. W. CHOWEN,
PLINY BARTLETT.