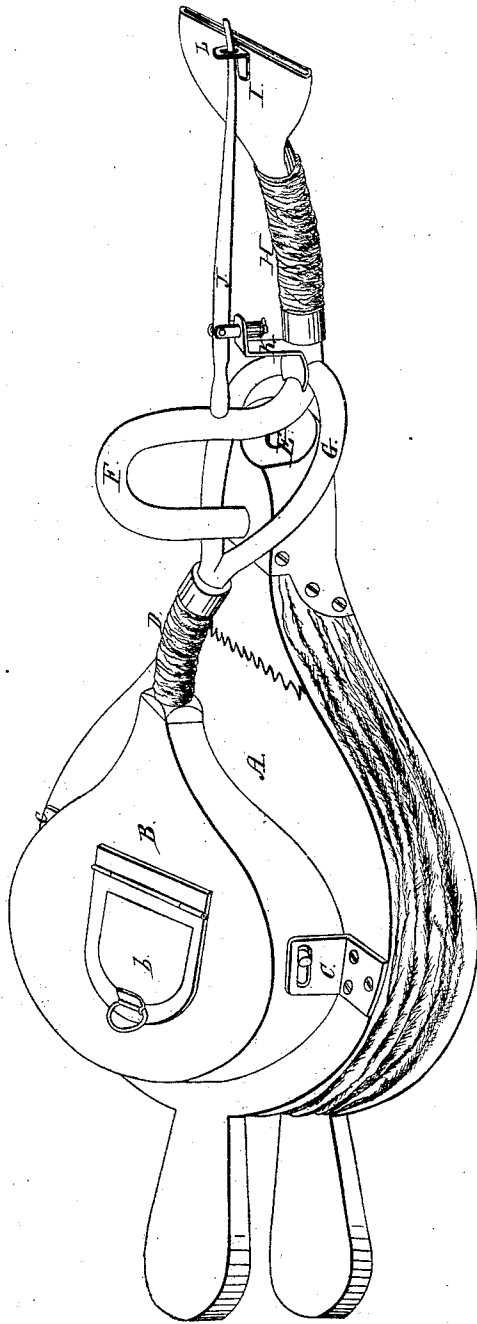


J. W. Hendley,

Sand Blower,

N^o 56,558.

Patented July 24, 1866.



Witnesses;
Wm. D. Conitt,
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JOHN W. HENDLEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN SAND-BELLOWS.

Specification forming part of Letters Patent No. 56,558, dated July 24, 1866.

To all whom it may concern:

Be it known that I, JOHN W. HENDLEY, of the city of Washington, in the District of Columbia, have invented a certain new and useful Improvement on Sand-Bellows; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawing, and to the letters and marks thereon.

The drawing forming part of this specification represents a sand-bellows constructed under my invention, from which it will be seen that upon a bellows, A, of the usual construction, is placed the sand-box or chamber B, supported on plates or uprights C. The pipe or tube D, conveying the sand from the box up to the point of its connection with the pipe G, is an elastic pipe, made up of coiled wire covered internally and externally with leather or some elastic substance or material, or the pipe may be made of india-rubber or other like substance.

The continuing sand-pipe G can be a divided pipe, as is shown by the drawing. It opens into the air-pipe F from the bellows at about the point indicated, the pipe continuing on from the connecting point being both the sand and air pipe. This pipe H is constructed like the pipe D, and both it and D can be attached to the ends of the other pipes by a pin on the end of the one pipe and an angular slit or slot on the end of the other pipe, of the character of a bayonet-catch, so that when in use the connection will be firm, but allowing of easy detaching of the pipes when necessary. The outer end of pipe H is affixed to the spreading nozzle or delivery-piece I. The manner of connecting the pipes D and G and H with I here described allows of considerable movement or play of the nozzle I and sand-box B—so much so that the nozzle may be turned in any direction.

A lever, J, with its outer end playing in a slot of the standard L, serves to operate the nozzle and to hold it in the desired position. The inner end of the lever is sustained in a swivel-jointed rod attached to the supporting-plate K, so that the lever may be moved up or down or to the one or the other side, thus

having an extended range of motion. This swivel-joint, if tightly fitted, will bind sufficiently to hold the lever and nozzle in the position desired; but to this may be added any of the mechanical means commonly used for adjusting like parts.

The supporting-piece E may be an air-tube or not, as may be preferred.

The sand-box B has a lid or cover, b, to its feeding-hole. The bottom of the box is of that curved form which will permit of its easy motion over the upper plate or board of the bellows when the bellows is in use, which motion is facilitated by the pins on the sides of the box fitting into the slots of the plates C. As the upper plate or board of the bellows is raised in sanding the sand-box will be elevated with it, and a quantity of sand passed from the box down the pipes D and G to the point of union of the air and sand pipes, and on the downward movement of the upper plate or board this charge or quantity of sand will be driven forward and expelled from the nozzle, no sand passing out of the box during the downward movement, so that the pipes will not become clogged or overloaded; and, as the nozzle may be turned in any direction, the bellows can be kept at work with the regular charges of sand with the nozzle in any position.

What I claim as my invention, and as an improvement on sand-bellows, is—

1. The arranging of the sand-box above the bellows, so that it may be operated by the movement of the upper board or plate of the bellows, substantially as herein recited.

2. The connecting of the box to the pipes and the nozzle to the sand and air pipes by the elastic pipes, constructed and operated substantially as set forth.

3. In combination with the nozzle and the conducting-pipe, the lever J, constructed and arranged so that the parts may be operated as described.

This specification signed this 30th day of April, 1866.

J. W. HENDLEY.

Witnesses:

THOS. T. EVERETT,
T. SMITH.