No. 882,318. PATENTED MAR. 17, 1908

I. H. HOWE.

SAW ATTACHMENT.

APPLICATION FILED NOV. 14, 1907.

Fig. 1.

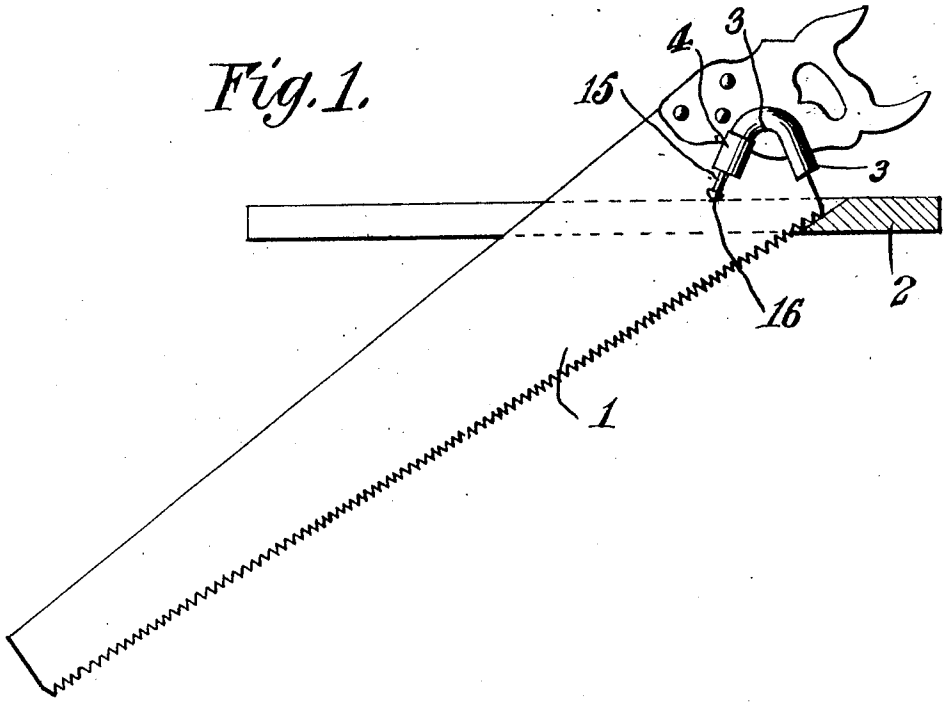
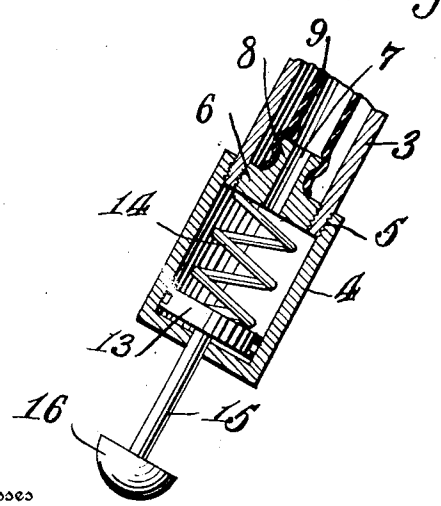
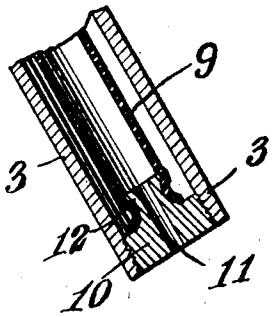


Fig. 2.





Witnesses

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UNITED STATES PATENT OFFICE.

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SAW ATTACHMENT.

No. 882,318. Specification of Letters Patent. Patented March 17, 1908.

Application filed November 14, 1907. Serial No. 402,200.

To all whom it may concern:

Be it known that I, ISAAC H. HOWE, a citizen of the United States, residing at Beloit, in the county of Mitchell and State of Kansas, have invented new and useful Improvements in Saw Attachments, of which the following is a specification.

This invention relates to saw attachments, the object of the invention being to provide a saw attachment consisting of a blower for scattering the saw-dust away from the marked line along which the cut is being made so as to make said line plainly visible at all times, the blower being operated automatically during the sweep of the saw and embodying means whereby a prolonged blast is obtained so as to effectively scatter the saw-dust without requiring any attention whatever on the part of the mechanic.

With the above general object in view, the invention consists in the novel construction, combination and arrangement of parts hereinafter fully described, illustrated and claimed.

In the accompanying drawings, Figure 1 is a side elevation of the device applied to a saw, also illustrating a board and the manner in which the device is operated. Fig. 2 is an enlarged longitudinal section through the two end portions of the casing.

In the drawings, 1 designates an ordinary hand saw, 2 a board or plank being operated upon, and 3 the casing of the blower attachment.

The casing 3 is of tubular form and is bent or curved intermediate its ends so as to dispose the two extremities thereof downward or toward the teeth of the saw or substantially so as illustrated in Fig. 1. The casing 3 comprises at one end a removable section or cylinder 4 which is preferably connected thereto by a threaded engagement as shown at 5 threaded to the main section of the casing 3 so that it may be readily removed therefrom.

In one end of the main section 3 there is arranged a coupling 6 in the form of a plug preferably threaded into the end of the casing so as to be removable therefrom, said plug being provided with a central opening 7 and a projecting boss 8 of suitable formation to receive one end of an inner expansive tube 9 of rubber or its equivalent.

A similar coupling 10 is removably screwed into the other end of the casing 3 and is provided with a central outlet opening 11 and a boss 12 around which the opposite end of the inner expansion tube 9 is secured.

Within the removable section or cylinder 4 of the casing is arranged a piston 13 which is held normally outward by a spring 14 bearing at one end against the piston and its opposite end against the inlet coupling 6 above described. The piston 13 is provided with a stem 15 extending outward through an opening in the end of the section 4 and provided with a suitable contact head 16 adapted to come in contact with the surface of the board being sawed in the manner illustrated in Fig. 1. The board thus acts to drive the stem 15 and piston upward, forcing the air contained in the section 4 of the casing through the small opening in the inlet coupling 6, filling and expanding the tube 9 and causing the air to be forced through the outlet opening 11 directly upon the surface of the board adjacent to the line of cut, thereby scattering the saw-dust away from said line. Owing to the expansibility of the inner tube 9, the same being smaller in diameter than the interior of the casing 3, said tube is expanded temporarily by the air forced into the same but as the air escapes through the discharge opening 11 said inner tube again contracts, thus prolonging the blast of air passing outward from the attachment, and creating a current of sufficient duration to enable the blower to effectively perform its work. The section 4 may be readily detached from the remainder of the device to permit cleaning and repairing when necessary.

Having thus fully described the invention, what is claimed as new is:—

1. A blower for saws embodying a blower cylinder and piston, and an expansion tube for receiving and delivering air furnished thereto by the piston, said tube having an outlet of less diameter than the cylinder.

2. A blower for saws and the like embodying a tubular casing, a piston operating therein and having a stem which projects outside of the casing, an expansion tube arranged in the casing of less diameter than the casing, and couplings connecting said expansion tube with the casing, substantially as described.

3. A blower for saws and the like comprising a blower casing having a removable section, a piston working in the removable section and having a projecting stem, and an expansion tube receiving the air from the

piston and having an outlet opening smaller than the casing section in which the piston works.

4. A blower for saws and the like comprising a blower casing having a removable section, inlet and outlet couplings removably fitted in the ends of the main casing section, an expansion tube extending lengthwise of said main section and connected with the inlet and outlet couplings, and a spring-returned piston working in the removable section of the casing and provided with a stem which projects outside of the removable casing section, the outlet opening being of less diameter than the casing, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ISAAC H. HOWE.

Witnesses:
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