No. 774,864. PATENTED NOV. 15, 1904.

E. A. BOSTROM.

DEVICE FOR WETTING GRINDSTONES.

APPLICATION FILED MAR. 25, 1904.

NO MODEL.

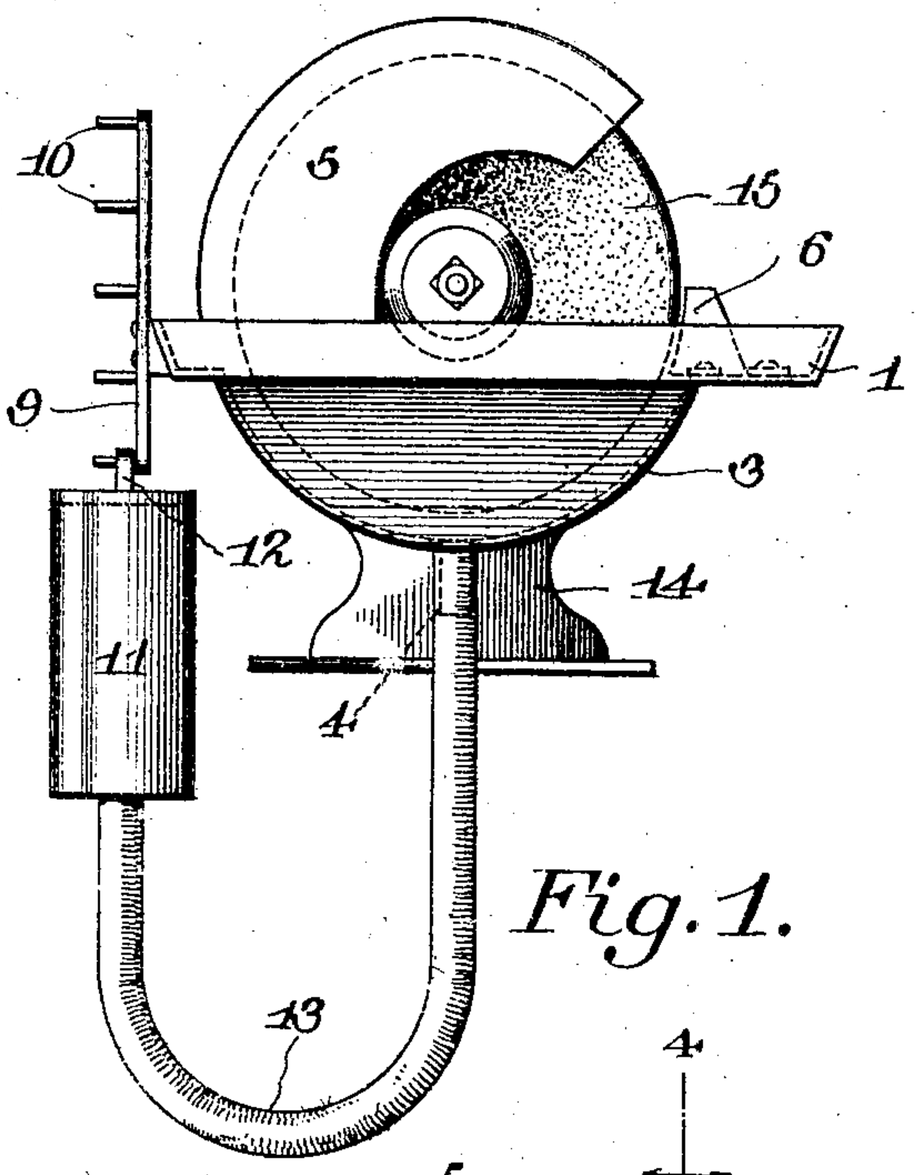


Fig. 1.

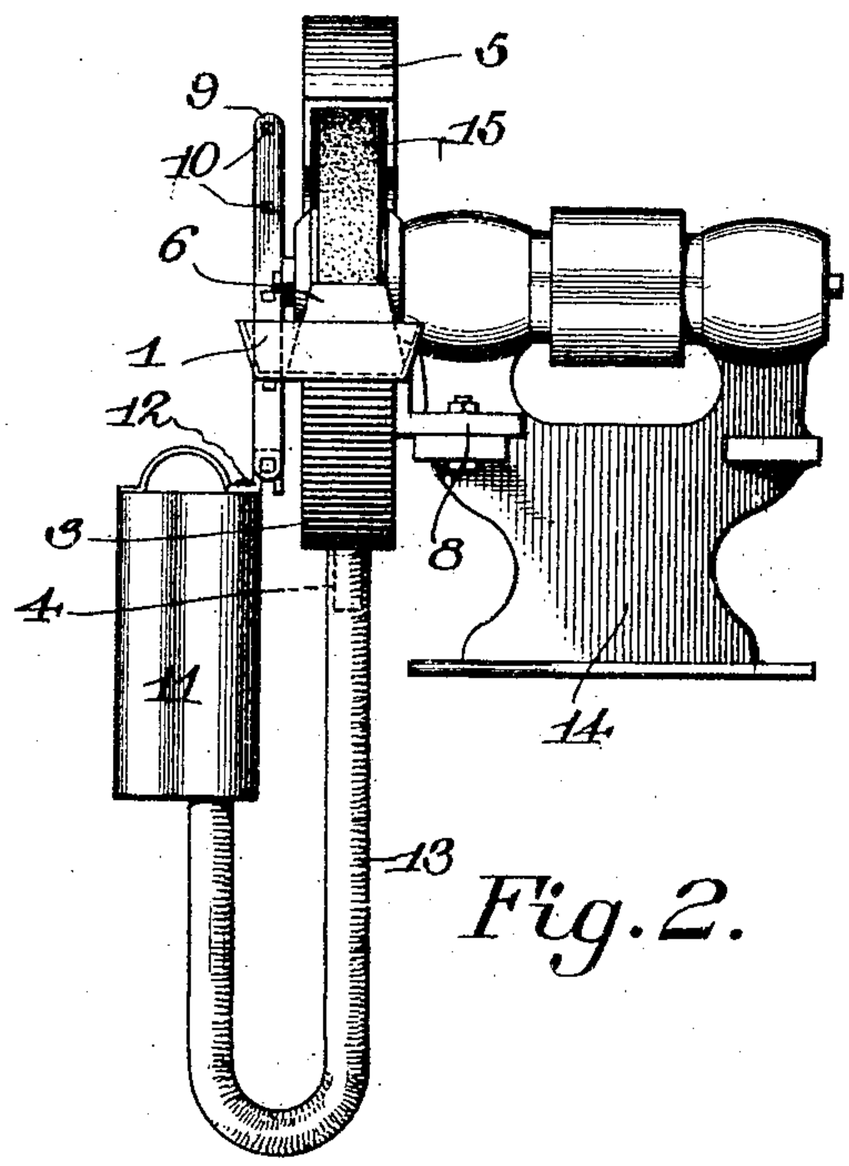


Fig. 2.

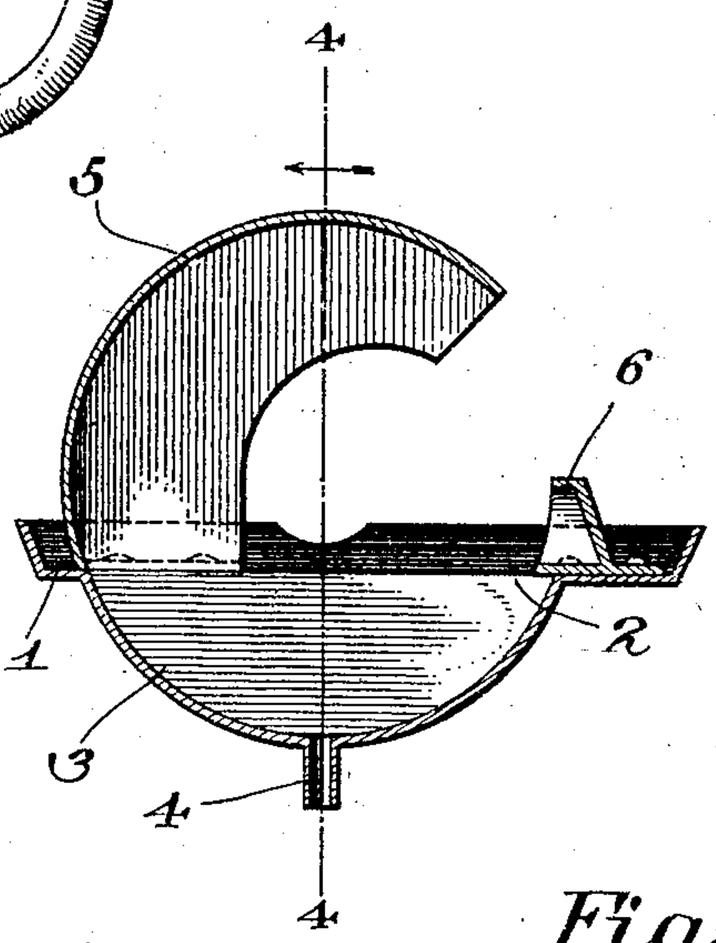


Fig. 3.

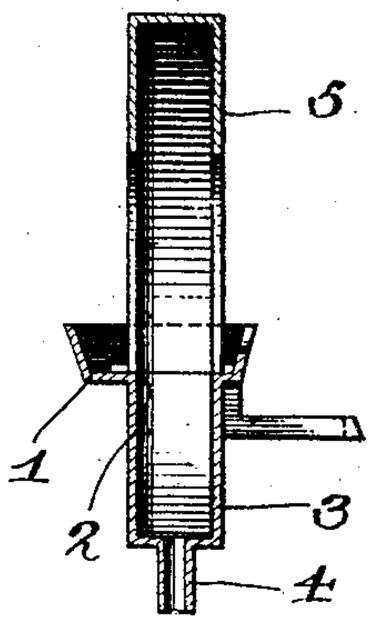
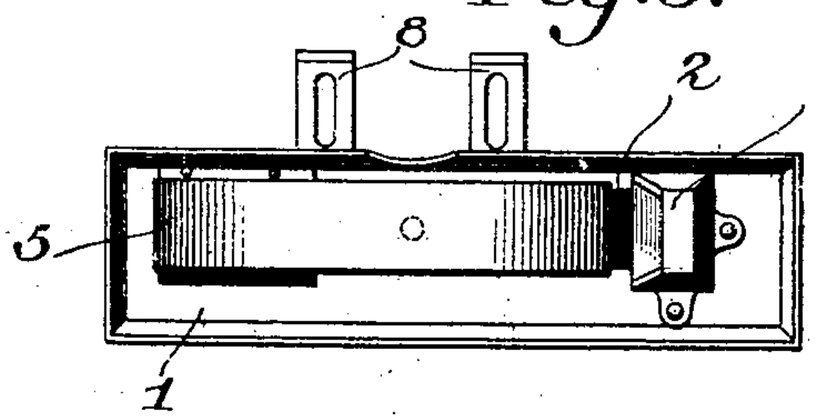


Fig. 4.

Fig. 5.



Witnesses
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No. 774,864. Patented November 15, 1904.

UNITED STATES PATENT OFFICE.

ERNST A. BOSTROM, OF ATLANTA, GEORGIA.

DEVICE FOR WETTING GRINDSTONES.

SPECIFICATION forming part of Letters Patent No. 774,864, dated November 15, 1904.

Application filed March 25, 1904. Serial No. 199,972. (No model.)

To all whom it may concern:

Be it known that I, ERNST A. BOSTROM, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Device for Wetting Grindstones, of which the following is a specification.

This invention relates to grinding-machines, and has for its object to provide for the convenient wetting of the grinding elements of grindstones.

Another object is to embody the invention in the nature of an attachment which is complete in itself, so that it may be applied to any ordinary grinding-machine without altering or changing the machine in any particular whatsoever and also to have the device capable of adjustment to conveniently apply moisture to and withdraw the same from the grindstone, thereby to maintain the stone wet or dry, as may be desired.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportions, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a side elevation of a grinding-machine having the attachment of the present invention applied thereto. Fig. 2 is a front view thereof. Fig. 3 is a longitudinal sectional view of the attachment. Fig. 4 is a cross-sectional view on the line 4 4 of Fig. 3. Fig. 5 is a plan view of the attachment.

Like characters of reference designate corresponding parts in each of the figures of the drawings.

In carrying out the present invention I employ a flat pan or receptacle 1, which is provided with a longitudinal opening 2 in the bottom thereof, and from the edges of this opening depends a segmental chamber 3, the bottom of which is rounded and is provided with an outlet passage or nipple 4. Rising from what will be termed the "rear end" of the opening 2 is an upstanding segmental casing 5, the open front of which terminates short of the middle of the opening 2 and is bolted forwardly, so as to overhang the opening. At the front end of the opening is an upstanding guard member 6, there being a sufficient space between the top of the guard and the hood or casing 5 to give access to the periphery of the grindstone, as will hereinafter appear. A pair of angular slotted brackets 8 project laterally from the bottom of the pan and are designed for the support of the attachment. An upstanding bar or bracket 9 is carried by the rear end of the pan and offset laterally therefrom, with a vertical series of pins or projections 10 extending rearwardly therefrom.

A suitable water pan or receptacle 11 is provided at its upper edge with a hook 12, whereby the pan may be hung from any of the pins or projections 10, and a flexible tube 13 affords communication between the bottom of the pan and the nipple 4 at the bottom of the chamber 3.

For an understanding of the application and operation of the present device attention is called to Figs. 1 and 2 of the drawings, wherein the reference character 14 designates the frame of a grinding-machine having any ordinary or preferred form of rotatable grinding element or grindstone 15. In fitting the present device to the machine the hood 5 is removed and the pan applied to the grindstone from the under side thereof, so as to receive the stone through the opening 2 in the bottom of the pan and within the casing 3, after which the brackets 8 are secured to one of the tool-supports of the frame of the machine. The hood 5 is then replaced, the pipe 13 is then connected to the nipple 4, and finally the can or receptacle 11 is supplied with water and hung upon the lowermost pin of the bracket 9, whereby the level of the water within the receptacle is below the lowermost portion of the peripheral edge of the grindstone. Hence the level of the water within the casing 3 is below the grinding-face of the grindstone, and thereby out of contact therewith. When it is desired to moisten the

stone, the water-receptacle is elevated and hung upon one of the upper pins, thereby elevating the source of supply, and consequently elevating the level of the water within the casing, whereby the lower edge of the grindstone will be dipped in the water within the casing, and thereby effectually moistened. It will now be understood that the purpose of the hood 5 and the guard 7 is to prevent scattering of the water by the centrifugal action of the grindstone, and it will of course be understood that there should be sufficient space between the guard and the front end of the hood to give convenient access to the peripheral edge of the stone in order that implements may be conveniently applied thereto when being sharpened. While the part 6 operates to prevent scattering of the moisture upon the operator it is primarily intended as a rest for the tool being sharpened. Therefore it will be understood that the part 6 is a wet rest when water is in the chamber 3 and a dry rest when the water has been withdrawn from said chamber.

From the foregoing description it is apparent that the device of the present invention is entirely complete in itself and may be readily applied and removed without altering or changing the grinding-machine in any manner whatsoever. Moreover, when it is put in place it does not interfere with the usual operation of the machine, while at the same time it is capable of convenient adjustment to apply moisture to the grindstone whenever desired and to withdraw the water therefrom whenever it is desired to maintain the stone in a dry condition.

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

1. A device of the character described comprising a casing to embrace a portion of a grindstone, a vertically-adjustable water-receptacle, and a flexible connection between the water-receptacle and the casing to supply water to the latter from the former.

2. A device of the character described comprising a casing to receive a grindstone, and a water-receptacle communicating with the casing and capable of vertical adjustment above and below the point of communication with the casing to vary the level of the water within the casing and to withdraw water therefrom.

3. A device of the character described comprising a casing to receive a grindstone, a bracket carried by the casing and provided with a vertical series of supports, a water-receptacle having means for interchangeable engagement with the supports for the vertical adjustment of said receptacle, and a flexible tube connecting the receptacle with the casing.

4. A device of the character described comprising a casing to receive a grindstone, a bracket carried by the casing and provided with a vertical series of projections, a water-receptacle having a hook capable of interchangeable engagement with the projections to support the receptacle at different elevations, and a flexible tube connecting the water-receptacle with the casing.

5. A device of the character described comprising a casing having a laterally-projected supporting-bracket, a hood rising from the rear end of the casing to overhang a grindstone, a bracket carried by the rear end of the casing, a water-receptacle carried by and capable of vertical adjustment upon the said bracket, and a flexible tube connecting the receptacle with the casing.

6. A device of the character described comprising a pan having an opening in the bottom thereof, a casing pendent from the walls of said opening and provided with a common inlet and outlet nipple, and means connected with the common inlet and outlet of the casing to supply and withdraw water therefrom.

7. A device of the character described comprising a pan having an opening in the bottom thereof, a casing pendent from the walls of said opening, and means communicating with the casing to supply and withdraw water therefrom.

8. A device of the character described comprising a pan having an opening therein and provided with a lateral attaching-bracket, a casing pendent from the walls of the opening and provided with a common inlet and outlet nipple, a bracket carried by the rear end of the pan, a water-receptacle carried by and capable of vertical adjustment upon the bracket, and a flexible tube connected to the water-receptacle and the nipple of the casing.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ERNST A. BOSTROM.

Witnesses:
F. M. Sisk,
J. A. Brady.