Feb. 6, 1940. E. F. HENRY 2,189,246

GRINDING MACHINE ATTACHMENT

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Fig. 1.

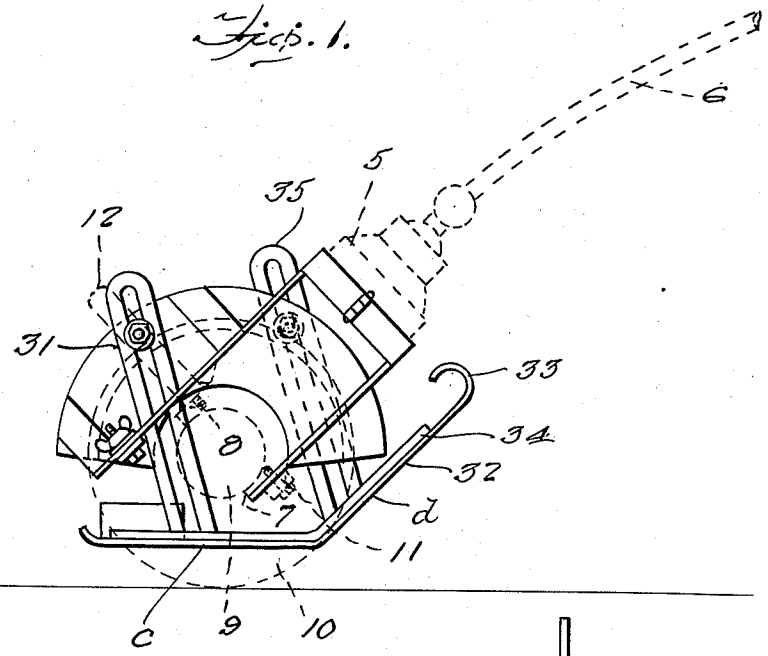


Fig. 8.

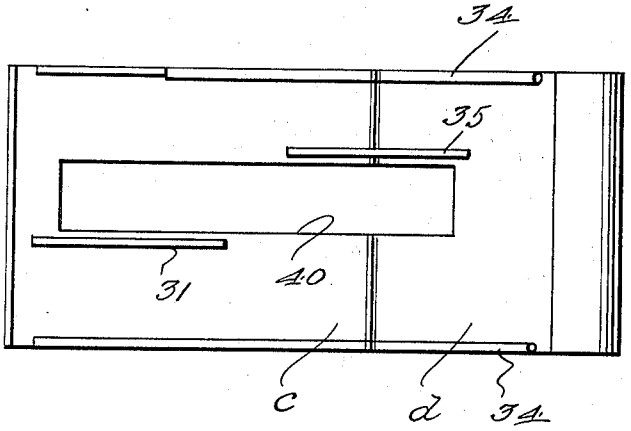
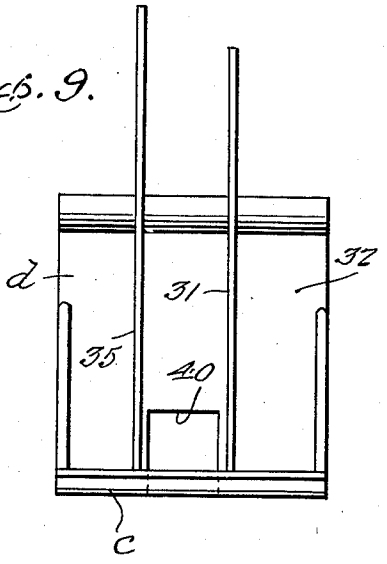


Fig. 9.



Inventor

E. F. Henry

By Clarence A. O'Brien and Hyman Berman

Attorneys

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Fig. 2.

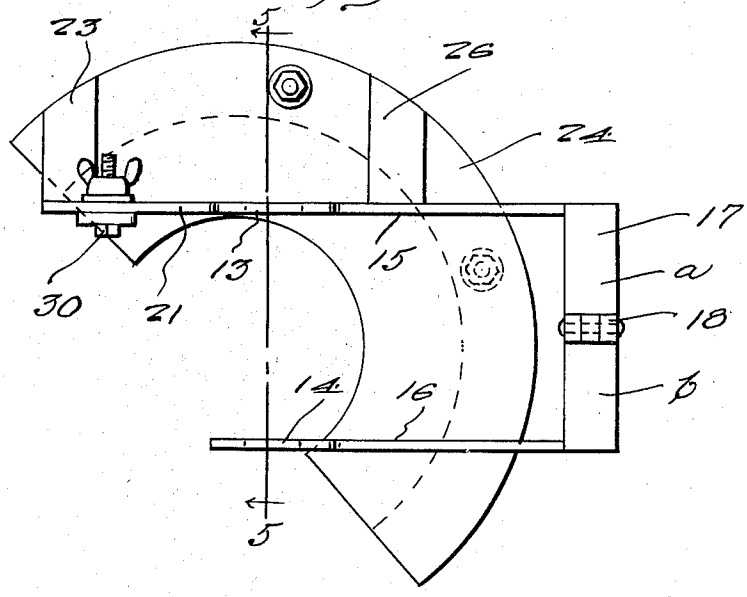


Fig. 3.

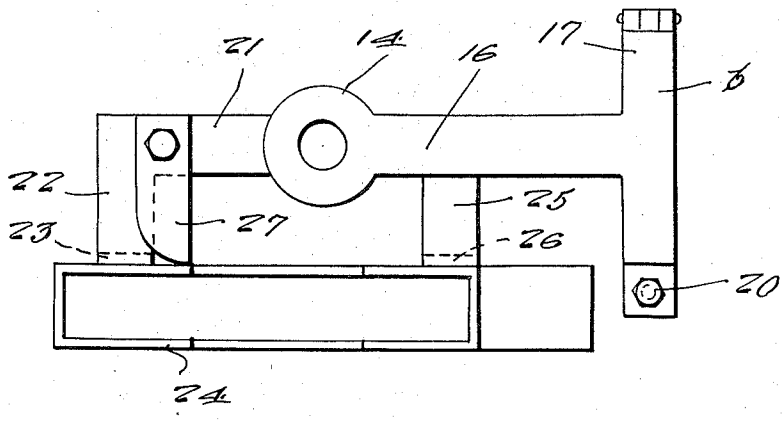
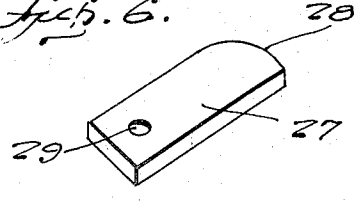


Fig. 6.



Inventor

E. F. Henry

By Clarence A. O'Brien and Hyman Berman

Attorneys

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Fig. 7.

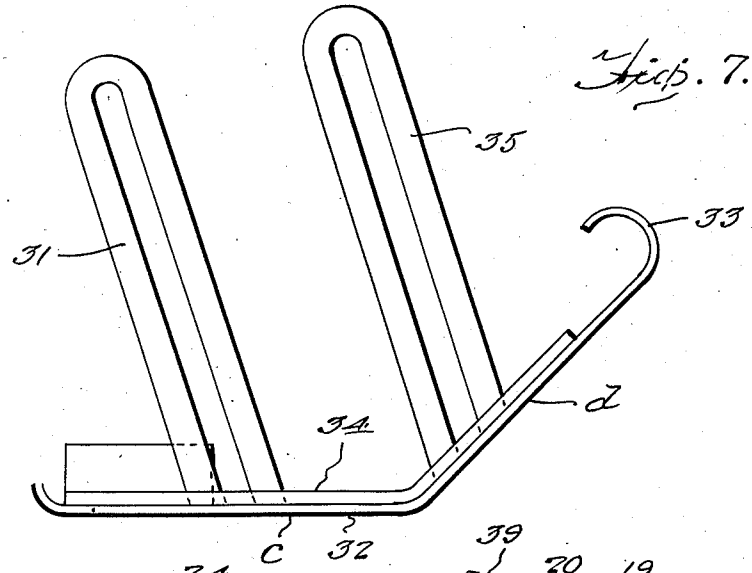


Fig. 4.

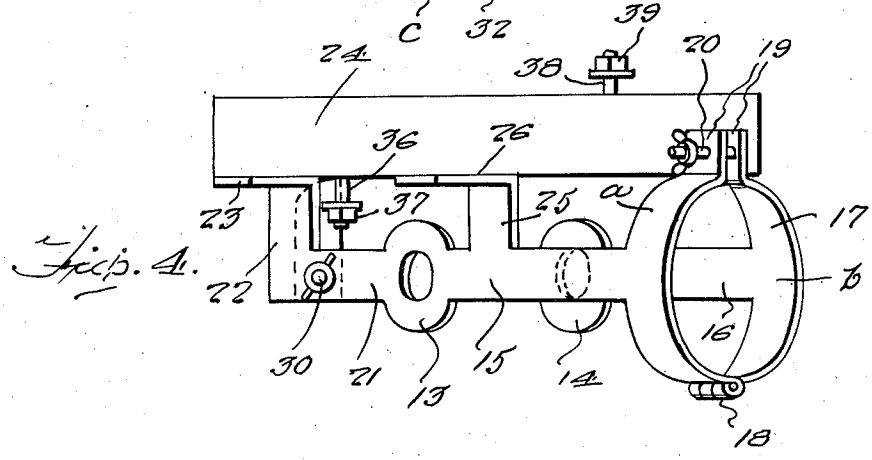
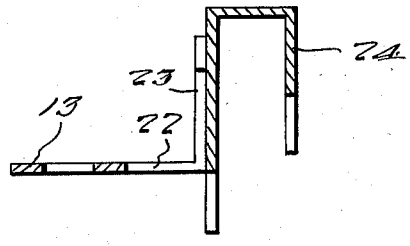
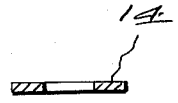


Fig. 5.





Inventor

E. F. Henry

By Clarence A. O'Brien and Hyman Berman

Attorneys

Patented Feb. 6, 1940

2,189,246

UNITED STATES PATENT OFFICE

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GRINDING MACHINE ATTACHMENT

Elmer F. Henry, Raton, N. Mex.

Application January 11, 1939, Serial No. 250,411

1 Claim. (Cl. 51—170)

This invention appertains to new and useful improvements in gauge attachments and more particularly to an attachment expressly adapted for use on grinding machines such as wheel grinding machines whereby the grinding machine can be used for cutting grooves in cement floors and the like.

The principal object of the present invention is to provide a gauge attachment which can be readily applied and removed with respect to the machine in a convenient manner.

Another important object of the invention is to provide such an attachment which will in no way cause alteration of the grinding machine.

Other objects and advantages of the invention will become apparent to the reader of the following specification.

In the drawings—

Figure 1 represents a side elevational view of the attachment, the grinding machine being shown in broken lines.

Figure 2 is a side elevational view of the hood structure.

Figure 3 is a bottom plan view of the hood structure.

Figure 4 is a top plan view of the hood structure.

Figure 5 is a section on the line 5—5 of Figure 2.

Figure 6 is a perspective view of the clamp member.

Figure 7 is a side elevational view of slide.

Figure 8 is a top plan view of the slide.

Figure 9 is an end elevational view of the slide.

Referring to the drawings wherein like numerals designate like parts, it can be seen that the usual grinder consists of the motor housing 5 from which extends the conductor cord 6, and this housing 5 has the lugs 7—8 extending from one end to embrace the gear box 9 through which a gear drive from the motor to the emery wheel 10 is located. A bolt 11 extends through the slots at a portion of the housing or box 9 and at the upper portion of the box 9 is a handle 12.

This bolt 11 also passes through the eye portions 13 and 14 of the legs 15 and 16 respectively which project from diametrically opposite points of the clamp ring 17, which clamp ring is made up of the two semi-circular sections *a*—*b* hingedly connected together as at 18 and having their remaining ends provided with lugs 19 through which the contracting screw 20 is disposed. This collar 17 is adapted to be disposed around the motor casing as suggested in Figure 1.

The eye 13 has the extension 21 and this extension has the laterally disposed foot portion 22 terminating in the lug 23, welded or otherwise secured to the semi-circular shaped hood 24 for the emery wheel 10.

The leg 15 also has the laterally extending arm 25, the lug portion 26 of which is also welded or otherwise secured to the adjacent side of the hood 24.

A clamp member 27 having one end curved over one of its corners as at 28, has an opening 29 at its opposite end for receiving the bolt 30 which is also disposed through the extension 21 of the leg 15.

This plate is adapted to engage against the upstanding slotted guide 31 to prevent vibration after the gauge slide 32 has been properly adjusted. The gauge slide 32 has the horizontal portion *c* and the inclined end portion *d*, the upper portion of the inclined portion being bent backwardly as at 33. The side edges of the portions *c* and *d* are rolled inwardly as at 34 to strengthen the slide. A second slotted guide 35 extends upwardly from the inclined portion *d* of the slide 32. The guide 31 extends upwardly at one side of the hood 24 while the guide 35 extends upwardly at the opposite side of the hood 24 and the slotted guide 31 received the threaded protuberance 36 projecting from one side of the hood 24 and which has the nut 37, while the slotted guide 35 receives the threaded protuberance 38 which projects from the opposite side of the hood 24 and has the nut 39. The guides 31 and 35 allow for different depths of cuts.

Obviously, the relationship of the hood with respect to the slide or gauge 32 can be accurately adjusted and these parts secured against further adjustment by the nuts 37 and 39 and the clamp plate 27.

The plates 32 forming the slide has the elongated narrow opening 40 therein extending across the portions c and *d* and between the slotted guides 31 and 35.

Obviously with this attachment, cement floors, newly laid, or old can be grooved in a quick and accurate manner in any desired design and to any desired depth.

While the foregoing specification sets forth the invention in specific terms, it is to be understood that numerous changes in the shape, size and materials may be resorted to without departing from the spirit and scope of the invention as claimed hereinafter.

Having described the invention, what is claimed as new is—

An attachment for grinding machines includ-

ing a grinding stone and a motor therefor; a grind wheel guard hood, a gauge plate having an inclined forward end portion, slotted arms rising from the plate, a clamp for embracing the motor, said clamp being attached to the hood and securing members disposed through the slotted arms and being connected to the hood for adjusting the distance of the plate below the hood, said clamp being of cage construction and divided into a pair of hingedly connected sections, one section of the clamp being attachable to one side of the motor and the other section being attachable to the opposite side of the motor.

ELMER F. HENRY.