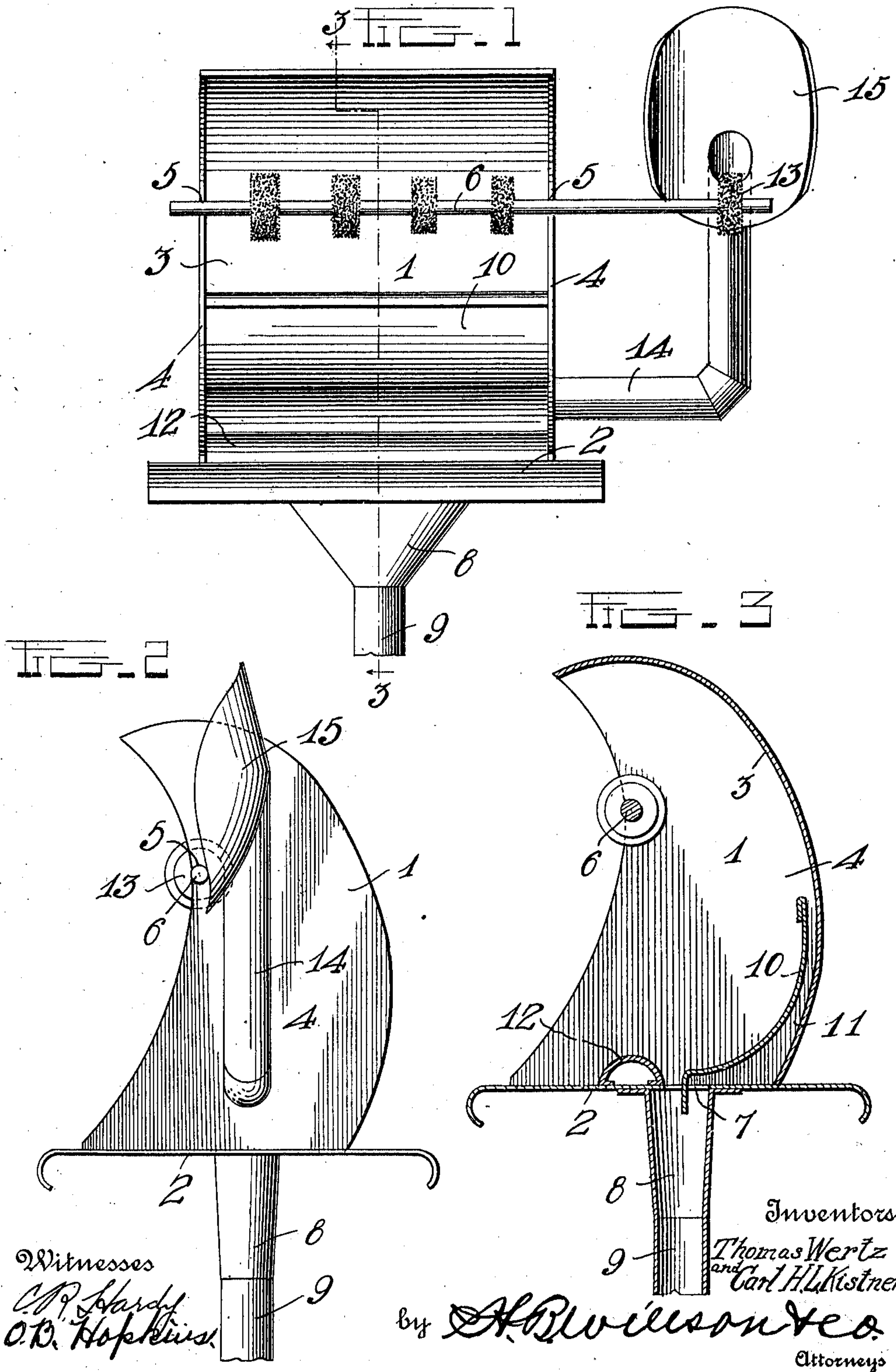


T. WERTZ & C. H. L. KISTNER.
DUST CATCHER FOR SHOE FINISHING MACHINES.
APPLICATION FILED JUNE 23, 1910.

990,086.

Patented Apr. 18, 1911.



UNITED STATES PATENT OFFICE.

THOMAS WERTZ AND CARL H. L. KISTNER, OF ST. LOUIS, MISSOURI.

DUST-CATCHER FOR SHOE-FINISHING MACHINES.

990,086.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed June 23, 1910. Serial No. 568,528.

To all whom it may concern:

Be it known that we, THOMAS WERTZ and CARL H. L. KISTNER, citizens of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Dust-Catchers for Shoe-Finishing Machines; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to improvements in dust catchers for shoe finishing machines.

One object of the invention is to provide a dust catcher having double suction chambers whereby all the dust will be effectually caught and carried away.

Another object is to provide an improved dust catcher which may be constructed and arranged to fit any size finishing machine and which is provided with a shield to prevent the dust from reaching the operator.

With the foregoing and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings: Figure 1 is a front view of a dust catcher constructed in accordance with the invention; Fig. 2 is an end view of the same; Fig. 3 is a central vertical cross section on the line 3—3 of Fig. 1.

In the embodiment of the invention we provide a hood 1 which may be formed of any suitable material and is preferably constructed of sheet metal. The hood 1 comprises a base plate 2 adapted to rest upon the frame of a shoe finishing machine, said base plate having downwardly curved flanges formed on its front and rear edges to grip the frame of the machine and hold the hood in place. The hood 1 further consists of an upwardly projecting forwardly curved rear wall 3 and end walls 4 said walls being secured to the base plate in any suitable manner. The front edges of the end walls are recessed or formed on a curve to prevent their interfering with the operation of the machine. The end walls 4 are also notched as at 5 to receive the shaft 6 of the machine which contains the finishing wheels and brushes.

In the base plate 2 at a suitable distance from the front edge thereof is formed a longitudinally disposed slot 7 with the under side of which is connected a dust receiving funnel 8 to which is connected the upper end of a suction discharge pipe 9 which is connected with or has arranged therein at some point in its length a suitable suction mechanism (not shown).

Arranged in the rear lower portion of the hood and spaced a suitable distance from the rear wall 3 is a curved plate 10 which forms a partition and provides a rear dust compartment or chamber 11 which communicates at its lower end with the slot in the base plate and the upper end of the funnel 8. The forward edge of the shield plate 10 terminates at a point substantially in line with the center of the slot 7 and said forward edge of the plate is turned downwardly to a slight extent. To the base plate 3 adjacent to the forward edge of the slot 7 is secured a substantially semi-circular guard or shield 12 which positively prevents any of the dust from being blown back or reaching the operator.

Arranged at one end of the hood 1 is a supplemental dust catcher which is disposed opposite to the heel polishing wheel 13 which is arranged on this end of the shaft 6 as shown. The supplemental dust catcher comprises a dust conveying tube 14 which is connected at its lower end to one end of the hood 1 adjacent to the lower end of the partition plate 10 and which is provided on its upper end with a flared mouth piece 15 which is adapted to catch any dust caused by the engagement of the shoe heel with the heel polishing wheel 13 and direct the same into the upper end of the tube 14 through which it is drawn into the hood 1 and from thence passes through the slot 7 and funnel 8 and is carried off by the suction pipe 9.

By constructing our improved dust catcher as herein shown and described the larger part of the dust will be drawn back against the rear wall of the hood and into the rear compartment or chamber formed by the partition plate 10 from whence it is drawn through the slot in the base plate and into the funnel. Any dust which may not be drawn back into the chamber 11 will be drawn into the front portion of the slot beneath the guard or shield plate 12 and into

the funnel. By thus arranging the parts of the catcher all dust will be caught and carried away from the machine and will be prevented from reaching or causing any annoyance to the operator.

From the foregoing description taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention as defined in the appended claims.

Having thus described our invention, what we claim is:

1. A dust catcher comprising a base plate, a hood thereon, a dust conveying pipe connected to said base plate and hood, a partition arranged in the hood to form a dust compartment in the lower rear portion of

the same, and a shield arranged on the base plate in the lower front portion of the hood.

2. A dust catcher for shoe finishing machines comprising a base plate having formed therein a discharge slot, a hood secured to said base plate over said slot, a dust conveying funnel, a discharge pipe connected to the lower side of said plate beneath said slot, a curved partition plate arranged in the lower rear portion of the hood to form therein a dust chamber connected at its lower end with said slot, and a curved shield plate arranged over the front portion of said slot.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

THOMAS WERTZ.
CARL H. L. KISTNER.

Witnesses:

A. H. WERTZ,
HERMAN A. BAUGHT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
