(No Model.)

G. HAY.

CHALK SHARPENER.

No. 517,922. Patented Apr. 10, 1894.

Fig. 1.

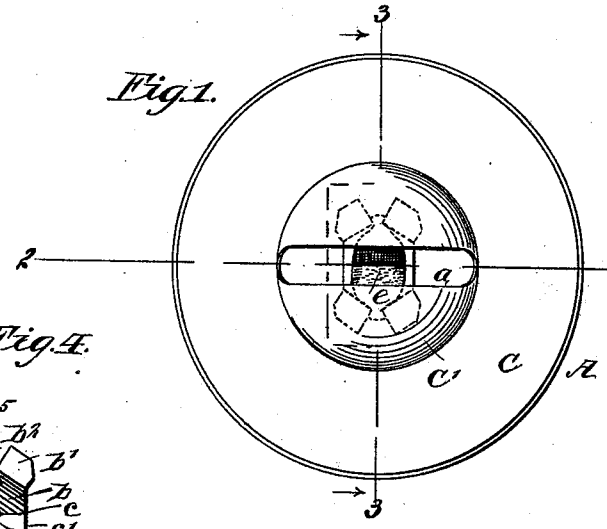


Fig. 4.

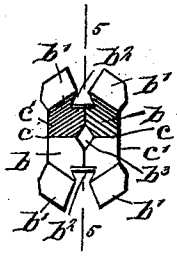


Fig. 6

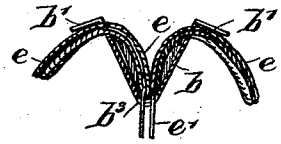


Fig. 2.

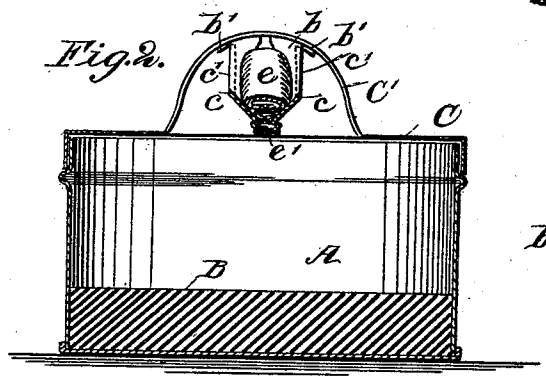


Fig. 5.



Fig. 7.



Fig. 9.

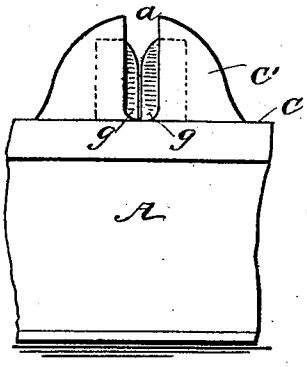


Fig. 3.

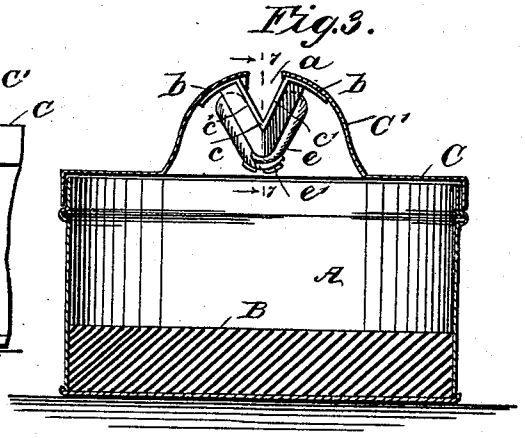
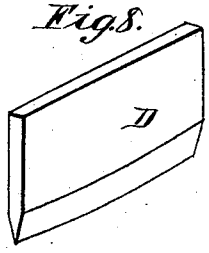


Fig. 8.



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GEORGE HAY, OF PICTOU, CANADA.

CHALK-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 517,922, dated April 10, 1894.

Application filed April 21, 1893. Serial No. 471,319. (No model.)

To all whom it may concern:

Be it known that I, GEORGE HAY, of Pictou, in the Province of Nova Scotia and Dominion of Canada, have invented a new and useful Improvement in Chalk-Sharpeners, of which the following is a full, clear, and exact description.

This invention relates to an improvement in chalk sharpening implements, and has for its object to provide a simple and efficient device of the character indicated, which will be adapted to smoothly sharpen chalk for cloth cutters' use, and remove the cuttings or dust therefrom, a further object being to provide the chalk sharpener with a closed receptacle for the shavings, and adapt said receptacle for service as a paper weight.

To these ends, my invention consists in the construction of parts, as is hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the device. Fig. 2 is a side view, in section on the line 2—2 in Fig. 1. Fig. 3 is a side view of parts, in section on the line 3—3 in Fig. 1. Fig. 4 is a detached top view of a detail of construction which is a feature of the invention. Fig. 5 is a side view in section, of the part shown in Fig. 4, on the line 5—5 in said figure. Fig. 6 is a transverse sectional view of the chalk cutter on the line 7—7 in Fig. 3, showing the manner of attaching a pliable wiper thereto, and which is a part of the invention. Fig. 7 is a detached and partly sectional side view of the cutter device and wiper attached thereto, on the line 7—7 in Fig. 3. Fig. 8 is a perspective view of a chalk tablet which has been sharpened on the improved implement; and Fig. 9 is a side view in part, of the device, showing an attachment to its base.

The base piece A, of the improved chalk cutting device, is made hollow and preferably cylindrical in form, from sheet metal, having its lower end sealed.

On the bottom wall of the receptacle or base-piece A, a disk B of lead or other suitable heavy material is located and secured, thus adapting the part A, to serve as a base for the chalk cutter, a receptacle for cuttings, and a proper weight if it is desired to utilize the device for the latter named purpose. A neatly fitting lid C, is provided for the base piece A, and on its flat top a spherical shell C′, is centrally formed or secured, this part being provided to afford support for the chalk cutting device. A central transverse slot *a*, of a proper width and depth is produced in the shell C′, and within the part C′, below the slot a cutting mechanism of a novel, simple form is affixed.

The chalk cutter mentioned, consists of two similar V-shaped cutter blades *b*, are bent from a single strip of sheet metal that is capable of receiving cutting edges. Said cutter blades are integral below the points *c*, where they oppositely and equally diverge, these points being the vertices of the angles defined by the divergent edges of the cutter blades; said edges *c′*, that diverge equally in pairs from the points *c*, are bevel sharpened to provide V-shaped cutters that are separated a correct distance for effective service. Each cutter blade *b*, is furnished with outwardly extending flanges *b′*, which are bent to conform to the inner surface of the spherical shell C′, whereon they are secured at such points as will locate the vertices *c*, of the cutter blades *b*, at the transverse center of the slot *a*.

The wiper *e*, consists of a strip of soft undressed leather, or any other suitable material, which is proportioned in width and length to suit the dimensions of the cutting device on which it is affixed. There are opposite notched holes b^2, formed between the two flanges *b′*, of each blade *b*, as shown in Fig. 4, these apertures being designed to receive the wiper strip *e*, and at the junction of the blades *b*, a hole b^3, is formed of small diameter, as indicated in the same figure.

To place the strip *e*, in position on the cutter device, the ends of said strip are passed from the inner sides of the blades *b*, outwardly and through the holes b^2, a sufficient portion of the material being left between the blades to extend to the hole b^3, in a doubled condition. A staple *e′*, is inserted through the bight of the flexible strip *e*, and thence through the hole b^3, its limbs projecting from the lower end of the integral portion of the divergent blades *b*. The end portions of the

wiper strip *e*, are now drawn taut and near their terminals are lap folded, the staple *e'*, being made to penetrate said folded ends, and then the limbs of the staples are bent to press on the portions of the wiper strip they have penetrated, so as to secure the latter neatly and firmly in place on the cutter device.

In Fig. 9, there is an attachment for the base piece A shown, consisting of the pliable flaps *g*, that are secured on the inner surface of the slot *a*, at opposite points, and near the terminals of the slot, these flaps serving to prevent dust escaping from the slot on either side of the same when the device is in use.

When the lid C is placed upon the base piece A, a slab of steatite such as D, in Fig. 8, may have a beveled edge quickly formed on it, by first inserting it in the slot *a*, and then reciprocating the slab while it is pressed gently upon the cutter blades *b*, the dust and cuttings being removed by the wiper strip *e*, that also prevents too free a cutting action that would produce a rough edge on the chalk tablet. After an edge has been produced as above described, on a piece of the soapstone technichally known as "tailor's chalk," and has become worn down in use, said edge can be renewed quickly by a few passes of the tablet through the cutter device. At any time it is necessary, the cutting edges of the blades *b* may be sharpened by using a fine file on them, after the lid C has been removed from the base-piece A. The latter serves in use as a receptacle for the dust and cuttings removed from the tablet of steatite when an edge is produced on it.

The weighty bottom wall B of the base piece, is of advantage in using the implement, as it renders the chalk cutters stable, and enables the operator to use it without having to hold it in place, when the chalk needs to be redressed on the edges slightly, to render it serviceable.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a chalk sharpener the cutter formed of a V-shape body having its end edges *c' c'* sharpened; each blade *b* of the cutter being angular in cross section and the attaching flanges *b'* at the upper ends of the blades *b*, substantially as set forth.

2. In a chalk sharpener the cutter formed of a V-shape body provided with opening b^3 and having its end edges *c' c'* sharpened, each blade *b* of the cutter being angular in cross section and provided at its upper end with flanges *b'* and slots b^2, substantially as set forth.

3. In a chalk sharpener, the combination with a V-shaped cutter body having two similar blades each angular in cross section and provided with an opening at its upper end, the body being provided with an opening at the juncture of the said blades, of a wiper doubled upon itself and having its ends passed through the openings in the blades, and a staple secured in the doubled portion of the wiper, passed out through the opening in the body of the cutter and engaging the ends of the wiper, substantially as described.

4. The combination with the hollow slotted support and the V-shape cutter thereon provided with a wiper, of the dust guards *g g*, substantially as set forth.

5. The combination with a hollow base, a lid, a hollow slotted projection on the lid, and a pair of cutter blades below the slot, of a wiper device on the cutter device between its blades, substantially as described.

6. The combination with a hollow base, a lid, a hollow slotted projection on the lid, and a pair of V-shaped depending cutter blades sharp on edges that diverge in pairs at like angles, of a pliable wiper strip secured on the cutter blades between the pairs of V-shaped sharp edges, substantially as described.

7. The combination with a hollow base, a weighty bottom thereon, a removable lid, a slotted spherical projection central on the lid, and a wiper on the projection at its slot, of a pair of cutter blades below the slot in the lid, and a wiper device on the cutter blades between their edges, substantially as described.

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Witnesses:
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FRANK P. CARROLL.