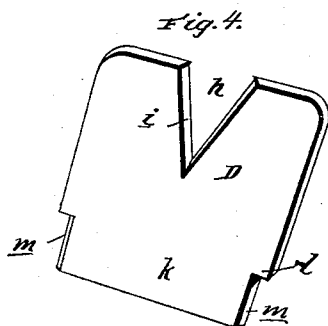
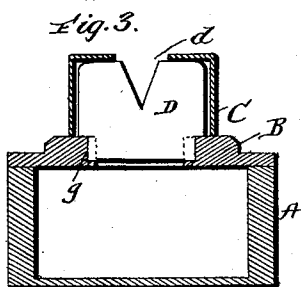
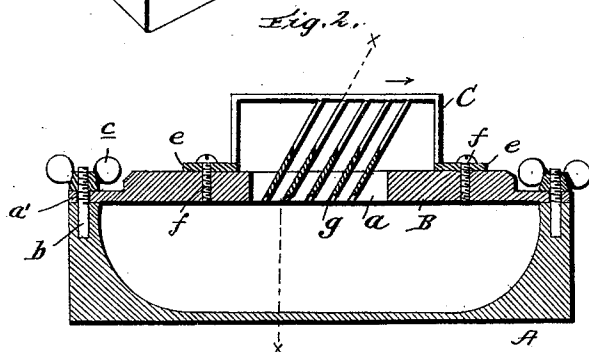
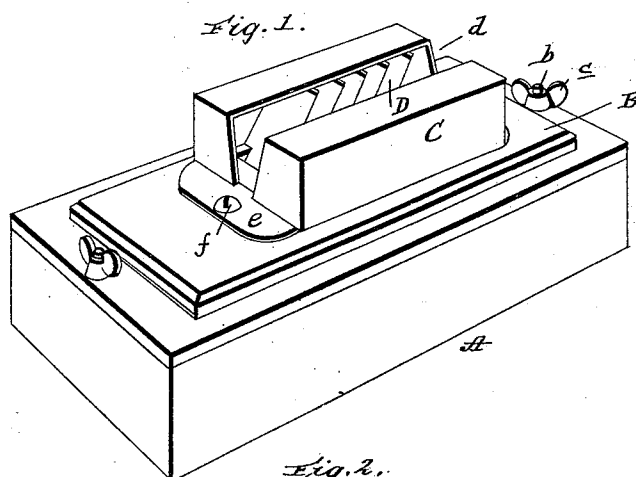


(No Model.)

F. A. PURCELL & J. MORGAN.
CHALK SHARPENER.

No. 477,310.

Patented June 21, 1892.



Witnesses:
C. H. Gaeder
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UNITED STATES PATENT OFFICE.

FRANK A. PURCELL AND JOHN MORGAN, OF VINCENNES, INDIANA.

CHALK-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 477,310, dated June 21, 1892.

Application filed April 25, 1892. Serial No. 430,534. (No model.)

To all whom it may concern:

Be it known that we, FRANK A. PURCELL and JOHN MORGAN, citizens of the United States, residing at Vincennes, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Chalk-Sharpener; 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 a device for holding and sharpening tailors' chalk; and the novelty will be fully understood from the following description and claims when taken in connection with the annexed drawings, in which—

Figure 1 is a perspective view of our improved device. Fig. 2 is a vertical longitudinal central sectional view of the same. Fig. 3 is a vertical cross-sectional view taken in the plane indicated by the dotted line *xx* of Fig. 2, and Fig. 4 is a perspective view of one of the knives removed.

Referring by letter to said drawings, A indicates the box or chalk-holder. This box, which is preferably of rectangular form in outline, although it may be of any other suitable shape, is preferably formed of cast-iron or other metal. We do not, however, wish to limit ourselves to casting the box, as it may, if found desirable, be made of other material than metal, although for the sake of cheapness and durability as well as attaining the required weight we prefer to make it of cast metal.

B indicates the cover for the box. This cover is provided with a central aperture *a*, which is preferably of rectangular elongated form, although it is obvious that the shape might be changed. In the present illustration of our invention we have shown this cover as having an aperture *a'* through it near opposite ends to receive vertically-disposed threaded bolts or studs *b*, rising from the opposite end walls of the box A, and wing-nuts *c* are employed to secure the cover on said bolts or studs; but there are many ways in which the cover might be secured to the box, and among them might be mentioned spring-clamps arranged at suitable points on the box to catch over the edges of the cover, or the box might

have its walls grooved on their inner sides near the top edges and the marginal edges of the cover provided with a tongue to enter said grooves, so that the cover may slide and be stopped in its sliding movement at one end of the box by having said end wall higher than the opposite end wall and grooved to receive the adjacent end of the cover. The aperture *a* in the cover is provided with a top C. This top, which is also of a rectangular form in cross-section, has an open bottom, and its top and end walls are slotted, as shown at *d*, the slot being of a flaring form, so as to permit the insertion of a piece of chalk. This top is provided at opposite ends with horizontal flanges *e*, having holes to receive screws or bolts *f*, which take into threaded apertures in the cover B and secure the said top over the opening *a* in the cover B. The inner longitudinal walls of the aperture *a* are provided with obliquely-arranged parallel grooves *g* for a purpose which will be presently explained.

D indicates one of the knives. These knives are of a form substantially as shown in Fig. 4 of the drawings, being provided in their upper central edges with a V-shaped groove *h*, having cutting-edges *i*, and the lower vertical edges are reduced, so as to form a tongue *k*, having shoulders *l*. These knives are placed in the aperture of the top B, so that the shoulders *l* will rest upon the upper longitudinal walls of said aperture and the tongue *k* will project downwardly therefrom, so that the edges *m* of said tongue will enter and be firmly seated in the grooves *g*. The top C is then placed over the knives, so as to expose the cutting-edges thereof in the V-shaped slot *d* when said cover is secured to the top B by the screws or other suitable fastening devices.

We have illustrated our invention with five knives in position, and while it is desirable that this number be used, yet it is obvious that we may use more or less.

In operation when it is desirable to sharpen a piece of chalk it is simply necessary to place it within the slot of the top C and draw it on the knives in the direction of the arrow, when the dust or powder as it is removed from the cake or strip will fall through the interspaces formed by the knives and into the box beneath.

Having described our invention, what we claim is—

1. A chalk-sharpener comprising a box or receptacle, a slotted cover arranged thereon, 5 and a knife or knives having a V-shaped slot and arranged obliquely in the slot of the cover, substantially as specified.
2. A chalk-sharpener comprising a box or receptacle having a slotted cover, a knife or 10 knives having a V-shaped slot and fixed obliquely in the slot of said cover, and a top for said knives also having a longitudinal V-shaped slot, substantially as specified.
3. A chalk-sharpener comprising a box or 15 receptacle, a removable cover having a verti-

cal slot and grooves in its opposite walls, the knives having the shouldered and reduced portion adapted to bear in the groove of the slotted cover and also having a V-shaped slot forming cutting-edges, and a cover for said 20 knives having a longitudinal V-shaped slot, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

FRANK A. PURCELL.
JOHN MORGAN.

Witnesses:

L. M. BECKES,
E. L. GLASS.