No. 686,712. Patented Nov. 19, 1901.

H. S. CARLEY.

KNIFE.

(Application filed Dec. 3, 1900. Renewed Oct. 17, 1901.)

(No Model.)

Fig. 1.

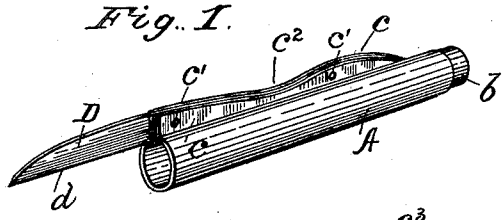


Fig. 2.



Fig. 3.

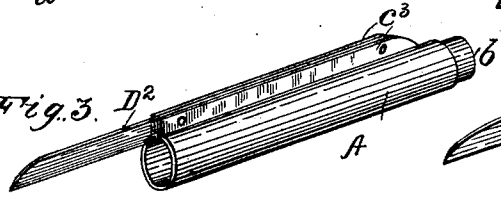


Fig. 7.

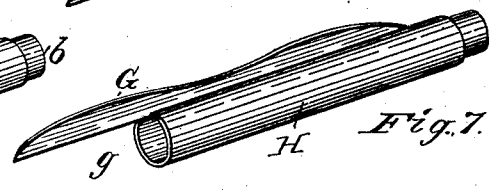


Fig. 4.

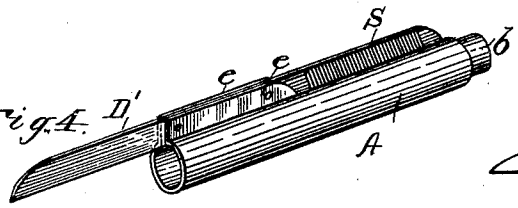


Fig. 8.

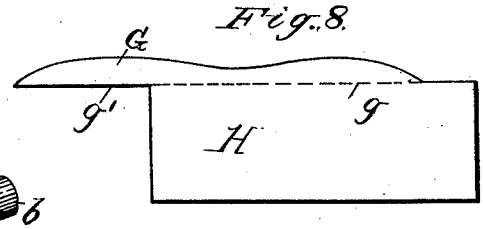


Fig. 5.

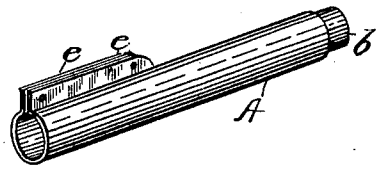


Fig. 6.

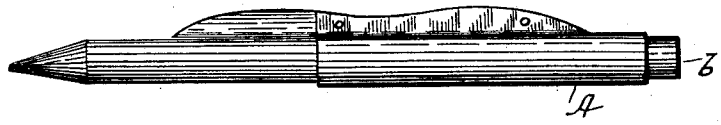


Fig. 9.

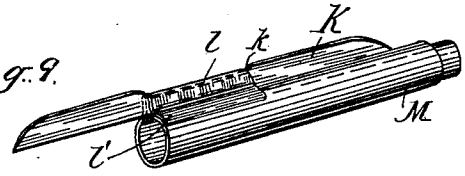
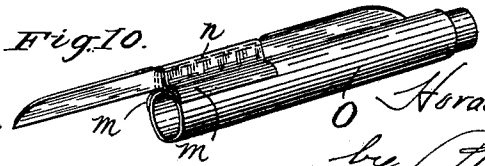


Fig. 10.



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KNIFE.

SPECIFICATION forming part of Letters Patent No. 686,712, dated November 19, 1901.

Application filed December 3, 1900. Renewed October 17, 1901. Serial No. 78,935. (No model.)

To all whom it may concern:

Be it known that I, HORACE S. CARLEY, a resident of Hydepark, Massachusetts, have invented a new and useful Improvement in Knives, which invention is fully set forth in the following specification.

My invention consists in a knife having a hollow or tubular handle to which a blade is fixed in approximately a radial plane, the inner or cutting edge of the blade, which extends beyond the handle at one end, being in approximately longitudinal alinement with the inner surface of the tubular handle. When the knife is not in use, the end of a pencil (or equivalent protecting means) is inserted into the open end of the tubular handle from which the blade projects, (the other end of the handle being preferably closed by a rubber eraser-tip,) and as the cutting edge of the blade (which latter assumes a practically perpendicular position with reference to the surface of the pencil) rests against or in close proximity to the surface of the pencil and is protected thereby the knife may in this manner be transported about in the pocket without danger of injury either to clothing or person.

My invention also embraces features of construction which enable the knife to be manufactured with facility and placed on the market at minimum cost, as will be clearly understood from the accompanying drawings, wherein I have illustrated several different embodiments of the invention.

Figure 1 is a perspective view; Fig. 2, a detail perspective of the blade. Figs. 3 and 4 are perspective views of modifications. Fig. 5 is a detail perspective of the tubular handle of Fig. 4. Fig. 6 shows the knife of Fig. 1 in place on a pencil. Fig. 7 is another modification. Fig. 8 represents the blank from which the knife of Fig. 7 is made. Figs. 9 and 10 are perspective views of other modifications.

In Fig. 1, A represents a tubular handle of such interior diameter as to fit with suitable friction over the end of a pencil of ordinary size, said handle being closed at one end by a rubber eraser-tip *b*, secured therein in any suitable manner. Handle A is open along one side for almost its entire length, the meeting edges of the tube being bent outwardly to form flanges *c c*. D is the knife-blade, secured to the handle in such position as not to project into the tubular chamber thereof and interfere with the insertion of a pencil or the like into said chamber. In other words, the blade may be said to be secured to the handle outside of or exterior to the tubular chamber or hollow interior thereof or on or along the outer surface of the handle. This may be effected in various ways. As shown in Fig. 1, the blade is secured at one end between the said flanges *c c* by rivets *c' c'* and at its other end projecting beyond the handle, with its inner or cutting edge in approximate longitudinal alinement with the inner surface of tubular handle A. It is to be noted that the position of the blade is approximately in a radial plane of the tubular handle, which is important in that it enables power to be applied to the knife without danger of the same slipping or twisting in the hand, and, furthermore, when on a pencil, Fig. 6, the cutting edge is inaccessible with the blade so disposed more so than if the blade were at or near a tangent to the surface of the pencil. In order to present a gripping-surface better adapted to the shape of the grip of the hand, the outer edges of the flanges *c c* and blade D are curved to form a depression, as at c^2.

The construction shown in Fig. 3 is the same as that shown in Fig. 1, except that the outer edges of flanges c^3 c^3 and blade D^2 are straight.

In the modification shown in Figs. 4 and 5 the flanges *e e* are made shorter than the flanges in Fig. 1, and the part of the knife-blade D' which extends along the handle outside of the flanges is in the form of a file S, Fig. 4, suitable for use in manicuring finger-nails, &c.

As shown in Figs. 7 and 8, the handle and blade are formed integrally from a single piece of metal, preferably sheet-steel. A blank of proper form is shown in Fig. 8, G being the blade portion and H the handle portion thereof. In forming the knife from this blank part G is first bent at right angles to part H along dotted line *g*, and then part H is bent into the form of a tube, its meeting edges being preferably joined by solder or otherwise to form a continuous tube. The cutting edge *g'* of part G may be sharpened either before or after the bending.

In the modification shown in Fig. 9 the upper edge of blade K is recessed at *k* and a flap or clasp *l*, formed integrally with one edge of the blank from which tubular handle M is formed, engages over blade K in recess *k* and is curved at its free end *l'* to conform to the surface of the tubular handle, to which it may be secured, as by soldering.

The construction illustrated in Fig. 10 is the same as that shown in Fig. 9, except that the flap or clasp *n* instead of being formed integral with one edge of the blank of the handle is made entirely separate therefrom, its ends *m m* being soldered or otherwise secured to the tubular handle O on opposite sides of the blade.

As has been shown, modifications may be made within wide limits without departing from the principle of the invention.

What I claim is—

1. A knife consisting of a tubular handle and a blade exterior to the tubular chamber of the handle and in an approximately radial plane thereof and adapted to project beyond one end of said handle, the projecting end of the blade being sharpened along its inner edge.

2. A knife consisting of a tubular handle and a blade immovably fixed to the handle in an approximately radial plane thereof and exterior to the tubular chamber of said handle, said blade projecting beyond one end of the handle and being sharpened along the inner edge of its projecting end.

3. A knife consisting of a tubular handle, a blade extending along the outer surface of the handle and projecting beyond the same at one end thereof, the projecting end of the blade being sharpened along its inner edge, and means for immovably securing the blade to the handle.

4. A knife consisting of a tubular handle, a flange on said handle, and a blade immovably secured to said flange and projecting beyond one end of the handle, the projecting end of the blade being sharpened along its inner edge.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

HORACE S. CARLEY.

Witnesses:

ARTHUR L. BILLINGS,

MARTIN F. BURKE.