

(No Model.)

A. A. LOW.
COMBINATION POCKET IMPLEMENT.

No. 491,780.

Patented Feb. 14, 1893.

Fig. 1.

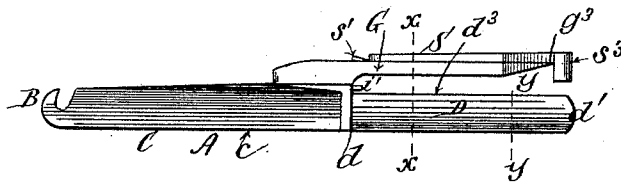


Fig. 2.

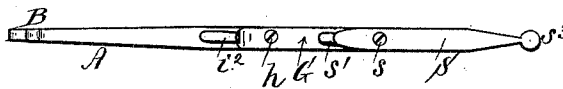


Fig. 3.

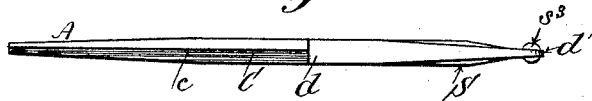


Fig. 4.

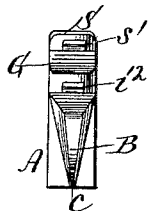


Fig. 5.

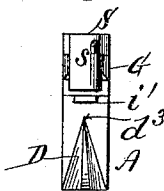


Fig. 6.

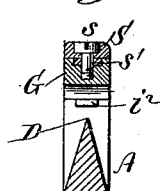


Fig. 7.



Fig. 8.

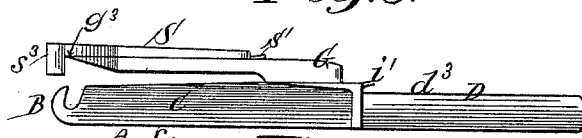


Fig. 9.

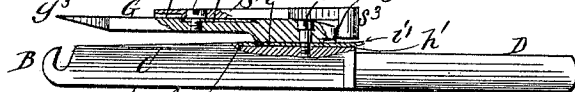


Fig. 10.



Witnesses:

Oliver Gardner
G. J. Miall

Inventor:

Abbot Augustus Low,
By his attorney,
George William Miall

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF BROOKLYN, NEW YORK.

COMBINATION POCKET IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 491,780, dated February 14, 1893.

Application filed January 27, 1892. Serial No. 419,397. (No model.)

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing in the city of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Combination Implements, of which the following is a specification sufficient to enable others skilled in the art to which the invention appertains to make and use the same.

My invention relates to the class of implements heretofore devised by me, and for which I have obtained a number of patents, as for instance those issued December 1, 1891, (Nos. 464,138, 464,139, 464,140, and 464,141,) designed to afford a convenient device suitable to be carried in the pocket, and capable of use in various ways in connection with the ordinary emergencies of daily life, the combined implement being adapted to perform the functions of a button hook or pull, paper cutter, nail cleaner, screw driver, and other instruments, according to the requirements of use.

My present improvements relate more particularly to the form of implement shown and described in Letters Patent No. 464,141, above referred to in which the cutting-blade is protected by a swinging guard which is adapted for use as a nail cleaner and for analogous purposes, and is shielded, in turn, when not employed in such special use, by a point protector. By the use of the point protector I not only guard the point effectually and positively against unintentional engagement with surrounding or adjoining objects, but I am also enabled to extend such pointed end of the cutting-edge guard approximately to or even beyond the end of the cutting blade, thus rendering both the cutting blade, and the point of its parallel guard more convenient and effective in use.

In my last patent hereinbefore referred to the point protector consists of a flat swinging plate, which when adjusted in position to protect the latter simply projects over and beyond it, a small disk being formed on the end of the point protector for this purpose, the curved edges of which are designed to avoid objectionable engagement or contact with other articles.

My present invention consists essentially in

forming the point protector with a lateral shoulder or projection which, when the protector is adjusted to shield the point, occupies a position in front of the point and prevents the possibility of the point engaging with any object. This lateral protector or shield is preferably, though not necessarily, cylindrical in form, so as to avoid engagement or frictional contact as far as possible with other objects; and its projection toward the outer end of the cutting blade contracts the entrance to the space between the latter and its parallel guard so as to exclude, to a great extent, the entrance of foreign objects into the space before the cutting blade. Thus practically only a narrow entrance is left to the space in front of the cutting blade, suitable only for cord &c. for the entrance of which room is designedly provided between the inner end of the cutting blade and the spur or projection of the point of the protector.

In the accompanying drawings, Figure 1, is an elevation of one side of my improved combination implement; Fig. 2, an edge view of the same upon the side, uppermost in Fig. 1; Fig. 3; is a view of the opposite edge of the implement; Fig. 4, an end view upon an enlarged scale, of the button hook end of the implement; Fig. 5, an elevation of the opposite extremity of the implement; Fig. 6, a transverse section upon plane of line *x, x*, Fig. 1; Fig. 7, a transverse section upon plane of line *y, y*, Fig. 1; Fig. 8, a side elevation of the implement similar to Fig. 1, showing the parallel guard swung back from the cutting blade; Fig. 9, is a similar view to Fig. 1, showing the point protector turned back over and parallel to the guard, exposing the point of the latter for use; Fig. 10, an elevation of one end of the implement showing a modified construction of the point protector.

The shank, A, is formed of a single piece of metal, including the hook B, straight edge and paper-cutter C, and cutting-blade D constituting also a combined wedge and screw driver.

In all essential respects the construction and arrangement of the body of the implement are substantially the same as in implements of the character heretofore invented

by me, especially the form shown in my last patent, No. 464,141, hereinbefore referred to. The hook B, is designed as a button or lace pull hook for shoes and for analogous uses.

5 The adjoining portion C, of the shank A, is formed with a straight edge *c*, adapted for use also as a paper-cutter. The interior blade D, is formed in the usual way except that it tapers gradually and uniformly longitudinally

10 from the shank *d*, to the outer end *d'*, as will be seen by reference to Fig. 3. The cutting edge *d²*, extends the whole length of the inner edge of the blade. The blade D, is V shaped in cross section, its back or spine being com-

15 paratively thick to impart strength and rigidity to the blade. The elongated wedge shape of the cutting blade D, not only permits of the insertion of the end of the blade between bindings &c. so that they may be

20 severed by the cutting edge, but also performs the functions of a wedge, screw driver, &c. as heretofore provided for by me in this class of implements by a shouldered head upon the

25 end of the blade, the main distinction in this respect in the present case consisting in tapering the blade longitudinally for its whole length, so that a smooth even surface is presented on both sides of the blade.

The interior blade D, is provided with the

30 parallel guard G, extending substantially the whole length of the cutting blade and beyond the end thereof if preferred. This guard G, may be made solid or rigid with the body A, of the implement, if desired, although I prefer to employ the form of pivoted swinging

35 guide shown in my patents hereinbefore referred to. Thus, in order that the guard G, may be swung out of the way when it is desired to employ the cutting-edge *d²*, of the

40 blade D, for cutting in any of the various uses to which the blades of pocket-knives are ordinarily applied, I pivot the said guard G, at *h*, to the edge of the shank A. A groove *h'*, is formed in the edge of the shank A, in

45 which a double-ended spring *i*, is situated, both ends *i'*, *i²*, projecting, when free, slightly beyond the edges of the groove *h'*. A corresponding groove *g'*, is formed in the under side of the guard G, at its rear extremity, into

50 which either one end or the other of the spring *i*, snaps when the guard is turned parallel to

the shank in either one direction or the other, as the case may be, as fully illustrated and described in my patent last recited hereinbefore.

55 The point shield consists of a movable section S, which may be adjusted over or retracted from the point *g³*, of the guard G. The shield S, is pivoted to the upper side of the guard G, by a screw *s*, the head of which is countersunk within the body of the shield S. A recess *g²*, under the shield S, contains a spring *s'*, the end of which engages with a corresponding recess *s²*, formed in the under

60 side of the shield S, when the latter is adjusted to shield the point *g³*, of the guard G. The outer end of the shield S, is formed with a lateral shoulder or finger *s³*, projecting toward the outer end of the cutting blade D. This lateral finger or extension is preferably

70 cylindrical in shape, and extends only a portion of the distance across the space between the guard G, and the blade D. If preferred however the guard G, and its point protector S, may be extended out beyond the end of

75 the blade D, and the lateral finger *s³*, of the protector S, may extend all the way across the space *d²*, and in front of the end of the blade D, as shown in Fig. 10, thus closing the space between the guard G, and blade D, and

80 protecting the end of the latter at the same time. Where the end of the blade D, is sharpened for use as a chisel or similar device this latter construction is especially desirable.

85 What I claim as my invention and desire to secure by Letters Patent is,

A combination implement substantially such as described, consisting of the shank A, pointed arm G, interior cutting blade D, and

90 pivoted protector S, formed with the lateral projection *s³*, extending in front of the point *g³*, of the guard G, and toward the outer end of the blade D, so as to contract the entrance to the space in front of the interior cutting

95 edge *d²*, the whole arranged substantially in the manner and for the purpose herein set forth.

ABBOT AUGUSTUS LOW.

Witnesses:

D. W. GARDNER,
GEORGE WILLIAM MIATT.