J. W. AYERS.

POCKET CUTLERY.

No. 185,062. Patented Dec. 5, 1876.

Fig. 1.

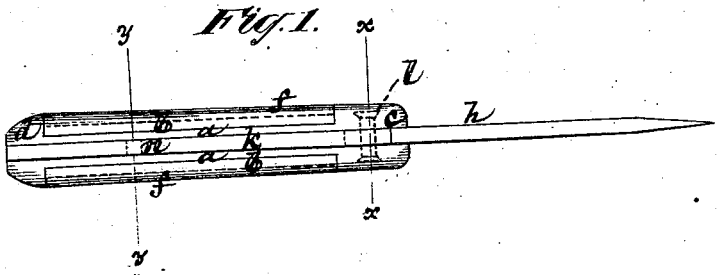

Fig. 2.

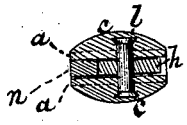

Fig. 3.

Fig. 4.

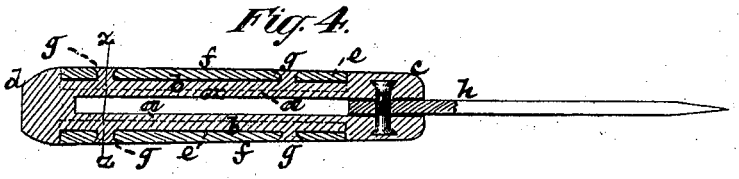

Fig. 5.

Witnesses
John Becker
Fred. Haynes

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UNITED STATES PATENT OFFICE.

JOHN W. AYERS, OF WEST MERIDEN, CONNECTICUT.

IMPROVEMENT IN POCKET-CUTLERY.

Specification forming part of Letters Patent No. **185,062**, dated December 5, 1876; application filed May 13, 1876.

To all whom it may concern:

Be it known that I, JOHN W. AYERS, of West Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Pocket-Cutlery; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, which forms part of this specification.

This invention consists in a novel construction of pocket-cutlery, whereby the inner scale, which is cast in one piece with the bolster and the tip, has also cast on its outer sides or surfaces ribs, which not merely serve to hold the covering-scale in position on the inner scale, but also materially contribute to stiffen the latter. The invention also consists in a cast inner scale, with the spring's pivot cast in one piece with it, and having the blade-pivot embedded in said casting.

A pocket-knife constructed in accordance with this invention has its blade or blades and spring secured in their respective positions, and the covering-scale secured in its position during and by the operation of casting the inner scale with its attached bolster and tip.

Said invention essentially differs from that described in Letters Patent issued to me March 12, 1873, in which the inner scale was of perforated sheet metal, and a filling of molten metal was used to unite the covering-scale with the inner scale, also to form and unite the bolster with the latter, and in which the blade and spring pivots were separately and subsequently inserted through the scale or scales.

Figure 1 represents a back view of a single-blade pocket-knife constructed in accordance with my invention, showing the blade extended or open; Fig. 2, a transverse section of the same on the line *x x*, and Fig. 3 a further transverse section on the line *y y*. Fig. 4 is a longitudinal section of the knife in a plane at right angles to Fig. 1, showing a modified construction for uniting the covering-scale with the inner one; and Fig. 5, a transverse section of the same on the line *z z*.

The inner scale *a* is cast in a mold, and may be of white or other suitable metal, and has stiffening-ribs *b b* cast at the same time along its outer sides or surfaces, also the bolster *c* and tip *d*. The stiffening-ribs *b b* have two functions or uses—that is to say, they not only serve to strengthen the cast inner scale *a*, but also hold the covering-scale sections *f f* in position by entering longitudinal grooves *e e* in the inner faces thereof. These grooves may either be of a dovetailed construction, as in my former patent hereinbefore referred to, and as shown in Figs. 1 and 2, whereby the ribs *b b*, of corresponding configuration, serve to lock as well as to hold the covering-scale or scale-sections in position, or the grooves *e e* may be constructed of a form which simply serves to hold the covering-scale in position transversely of its width, (the ribs *b b* being of corresponding configuration,) and riveting projections *g g* be cast on the ribs, and, by entering correspondingly-shaped holes in the covering-scale, serving, in conjunction with the ribs, to lock or secure the covering-scale sections in all directions, as clearly shown in Figs. 4 and 5 of the drawing. The ribs *b b* and grooves *e e* may either extend throughout the length of the scales, or only partially throughout their length, or be of a broken or interrupted construction throughout their length. Furthermore, the cast inner scale *a* has formed at the same time with it, in the process of casting, the pivot *n* of the spring *k*, which acts on the back of the blade *h*, likewise the back support for the spring at the tip *d*, said spring *k* being suitably inserted in the mold in which the inner scale *a* is cast. Said inner scale has also the blade-pivot *l* loosely embedded in and projecting through it and into the bolster *c*, with rivet-heads or swelled ends, as shown in Figs. 1, 3, and 4, by running the metal in the mold in the formation of the inner scale *a* and bolster *c* round said pivot *l*, which, together with the blade *h*, is suitably inserted in the mold for the purpose.

In this way the entire knife may be made or finished in the mold with the exception of externally dressing the covering-scale *f f*—that is to say, its inner scale, covering-scale or scale-sections, bolster, tip, blade, and spring all be secured in their respective relative or working positions by a single casting, with or without the rivet or pivot heads visible on the

exterior of the covering-scale. By such improvement I am enabled to produce pocket-cutlery at a much reduced cost and of a superior description.

I claim—

1. The inner scale *a*, cast in one piece with the bolster *c* and tip *d*, and with ribs *b b* along its outer sides or surfaces, for the purpose of stiffening the cast inner scale, and of uniting the latter with the covering-scale sections *f f*, substantially as specified.

2. The inner scale *a*, with the knife-bolster and tip, cast not only in one piece with each other, but also with the pivot *n* of the assembled blade-spring, essentially as described.

3. The inner scale *a*, with the bolster and tip, cast in one piece with each other, and with the pivot *n* of the blade-spring, in combination with the independently-embedded blade-pivot *l*, and the assembled blade *h* and spring *k*, substantially as specified.

JOHN W. AYERS.

Witnesses:

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FRED. H. TAYLOR.