F. A. Adams.

Comb, Caliper Rule and Wire Gauge.

No. 85,553. Patented Jan. 5, 1869.

Fig. 1.

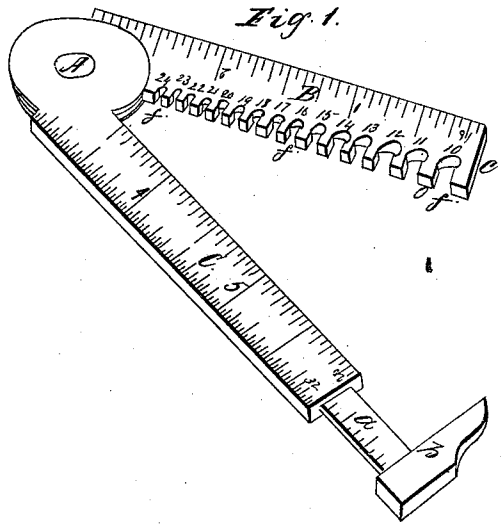
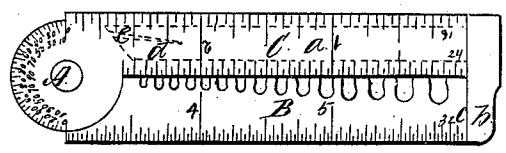


Fig. 2.



Witnesses:
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United States Patent Office.

FREDERICK A. ADAMS, OF SHELBURNE FALLS, MASSACHUSETTS.

Letters Patent No. 85,553, *dated January* 5, 1869.

IMPROVEMENT IN COMBINED CALIPER, RULE, AND WIRE-GAUGE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FREDERICK A. ADAMS, of Shelburne Falls, in the county of Franklin, and State of Massachusetts, have invented a new and useful instrument, which I term "A Combined Caliper, Rule, and Wire-Gauge;" and that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the instrument in question in perspective, and as opened for use.

Figure 2 represents the instrument as closed up, for being carried in the pocket, if desired to do so.

Similar letters of reference, where they occur in the separate figures, denote like parts of the instrument in both of the drawings.

I am aware that a patent has heretofore been granted for a caliper, rule, and wire-gauge, or, rather, for the mode of connecting these three things into one, but that construction was so cumbersome, unwieldy, inconvenient, and withal so uncertain and incorrect, as to make it comparatively valueless.

I have united these three instruments in one, so as to occupy but little more space than the rule itself. I have really combined the three devices in one, and not simply united them together; and

My invention consists in a combined caliper, rule, and wire-gauge, as will be hereafter explained.

To enable those skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

In the drawings I have shown a six-inch rule, having the usual rule-joint, A, in its centre, so as to fold up into a length of three inches.

The two parts B C are divided into inches, and subdivisions of an inch, in the usual well-known way.

In one of the arms C, which is made hollow for that purpose, slides the shank *a* of the caliper-head *b*, the end, *c*, of the other arm B, forming the other side or head of the caliper.

The shank *a* is laid off in inches and fractions, so as to set the caliper-head *b* at the desired distance, or to ascertain the distance by spanning the object between the caliper-heads *b c;* and the shank has, moreover, within the hollow portion of the arm C, an oblique slot, *d*, cut in it, so that the portion *e* may be made to serve the purposes of a spring, to hold, by its friction, the shank in the arm, and to prevent it from moving therein too easily.

The wire-gauge is shown at *f*, as made in the edge of the arm B, and is made to accurately ascertain the commercial numbers given to wire, each opening or notch being marked with that number.

The rule, six inches in length, is made just so much more in length than six inches, as the head *b* of the caliper measures in width, or, say, about six inches and one-fourth.

When the instrument is closed, the head *b* covers both of the ends of the arms B C, and makes a very neat finish. It is shown as closed in fig. 2.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

A combined caliper, rule, and wire-gauge, arranged in a single instrument, as herein described and represented, and for the purposes set forth.

FREDERICK A. ADAMS.

Witnesses:

J. W. GARDNER,
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