

G. H. SMITH.

Combined Spring Balance and Knife.

No. 21,520.

Patented Sept. 14, 1858.

Fig. 1

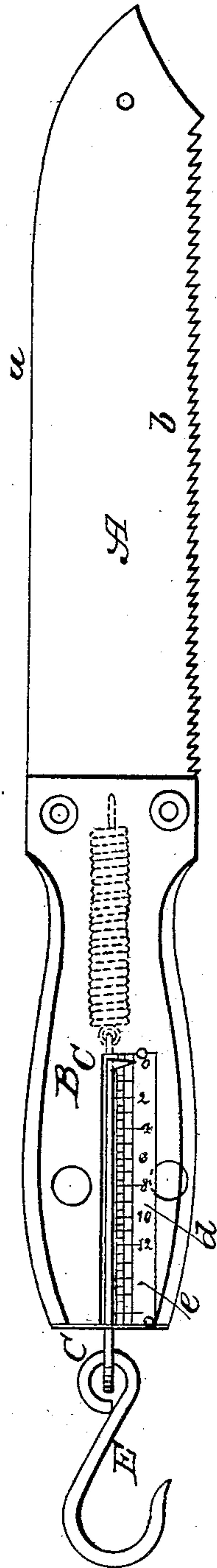
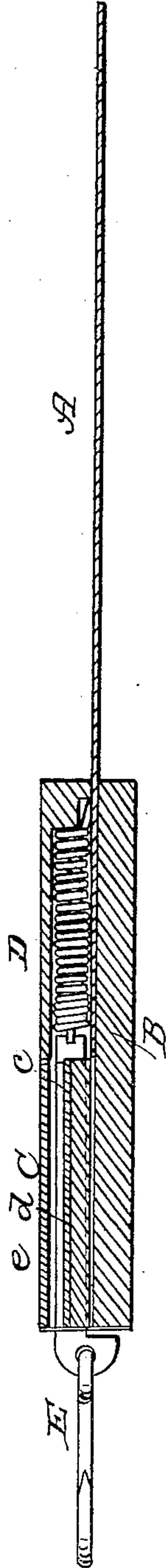


Fig. 2.



UNITED STATES PATENT OFFICE.

GEO. H. SMITH, OF GLENWOOD, IOWA.

SPRING-BALANCE IN COMBINATION WITH A KNIFE.

Specification of Letters Patent No. 21,520, dated September 14, 1858.

To all whom it may concern:

Be it known that I, GEORGE H. SMITH, of Glenwood, in the county of Mills and State of Iowa, have invented a new and useful
5 Improvement or Device, a Combined Spring-Balance and Knife; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of
10 this specification, in which—

Figure 1, is a side view of my improvement. Fig. 2, a longitudinal section of the knife handle.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in placing a spring balance within the handle of a knife such as is used by butchers and retail dealers in articles that are cut and sold by weight,—
20 so that articles may be cut and weighed by one and the same implement, the work being done equally as accurate and far more expeditiously than by the usual mode of cutting off the piece or article and placing
25 it in ordinary scales or in a balance.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

30 A, represents the blade and B, the handle of a knife such as is used by butchers, grocers and others, the blade having a cutting edge *a*, at one side and a saw *b*, at the other as shown in Fig. 1.

35 Within the handle B, a spring-balance is fitted. This balance is constructed in the usual way a bar C, being attached to a spiral

spring D, the bar having an index *c*, attached, the index traversing over a graduated plate *d*, which is fitted in one side of the handle and protected by a glass *e*. To
40 the outer end of the bar C, a hook E, is attached. The handle B, does not require to be made of more than usual size in order to admit the spring balance, as the latter does not require to have a very extended scale, it
45 being designed to weigh only in small quantities.

This implement will prove very valuable for butchers, grocers and retail merchants or dealers who cut articles and sell by weight
50 in small quantities as the article as soon as severed or cut from the mass by the blade A may be immediately weighed by inserting the hook E, into it and holding up the implement with the blade in a vertical posi-
55 tion.

The implement may be constructed at a reasonable price not greatly exceeding the cost of the usual knife.

I do not claim the knife nor do I claim in
60 the abstract or when separately considered a spring balance; but,

I claim as a new and useful article of manufacture and desire to secure by Letters
65 Patent,

A knife having a spring balance inserted in its handle as and for the purpose herein set forth.

GEO. H. SMITH.

Witnesses:

S. S. JAMISON,
E. W. WHEELER.