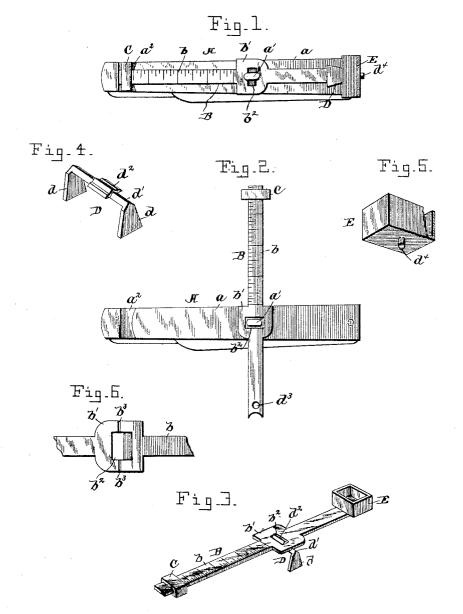
(No Model.)

E. D. MILES.

COMBINED POCKET KNIFE AND PHYSICIAN'S SCALE.

No. 460,147.

Patented Sept. 29, 1891.



Witnesses My Hodges Damillick Indentor EDMiles,

Attorney

UNITED STATES PATENT OFFICE.

EDWARD D. MILES, OF ICONIUM, MISSOURI.

COMBINED POCKET-KNIFE AND PHYSICIAN'S SCALE.

SPECIFICATION forming part of Letters Patent No. 460,147, dated September 29, 1891.

Application filed March 14, 1891. Serial No. 385,095. (No model.)

To all whom it may concern:

Be it known that I, EDWARD D. MILES, a citizen of the United States of America, residing at Iconium, in the county of St. Clair 5 and State of Missouri, have invented certain new and useful Improvements in a Combined Pocket-Knife and Physician's Scales, of which the following is a specification, reference being had therein to the accompanying drawto ings.

This invention relates to a combined pocket-knife and physician's scales, having for its object the production of cheap and simple means whereby a physician's scales can be 15 conveniently attached to a pocket-knife ready for use, and at the same time not materially add to the weight or bulk of the knife, and can be carried in the wearer's pocket as an ordinary knife.

The invention comprises a pocket-knife and a scale-beam detachably secured to one side

The invention further comprises a pocketknife, a scale-beam detachably secured to one 25 side thereof, a fulcrum or rest bar, and a scalepan, all of which are firmly secured to the knife when not in use.

The invention further comprises the detail construction, combination, and arrangement 30 of parts, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation, showing a pocket-35 knife constructed in accordance with my invention. Fig. 2 is a similar view showing scale-beam in position ready for removal. Fig. 3 is a view in perspective of the scale-beam as used in practice. Figs. 4 and 5 are details, 40 the former of the fulcrum-bar and the latter of the scale-pan. Fig. 6 is a bottom view of the fulcrum-point of the scale-beam.

Referring to the drawings, A designates a pocket-knife, the outer covering of one side 45 of which is omitted. From the side a of this knife projects a headed lug or stud a', and near the reduced end of said side is formed a transverse groove or recess a^2 .

B is a scale-beam, whereon are scales or 50 marks of graduation b. This beam consists

wherein is formed an oblong slot b^2 , which corresponds with the lug or stud a' when the bar is placed transversely across the knife. One side of slot b^2 is beveled or inclined, and 55 in the widened portion b' is a transverse groove b^3 . A sliding weight C is placed on the scale-beam, and the same is designed to rest in groove or recess a^2 when said beam is secured to a knife.

D is a fulcrum bar or rest for the scale-beam, and it consists of a bar d, having widened ends, and a cross-bar d', of ${\bf V}$ shape in crosssection, provided with a central crest or point d^2 , designed to fit into slot b^2 , while the re- 65 maining portion fits groove b^3 of the scalebeam. In this manner a fulcrum is provided for the scale-beam. In one end of said beam is a hole or aperture d^3 , wherein is designed to fit a lug or stud d^4 , projecting from the bottom of a scale-pan E, which latter is preferably square in shape.

From the foregoing description it will be seen that medicines and the like can be readily and easily weighed, the poise being capa- 75 ble of being moved to any point to balance the scale-pan and its contents. The scales are secured to the knife-handle by first placing the scale-beam in the position shown in Fig. 2, turning the same at right angles, so as to 80 extend longitudinally the length of the knife, and the weight fits snug in the groove or recess formed therefor. The fulcrum - bar is then pressed down over the widened end of the knife, (a groove w being preferably formed 85 in the side cover w' for reception of one side or end of said fulcrum-bar,) and the scale-pan is then forced down over the fulcrum-bar, holding the same and the scale-beam firmly in position on the knife.

The advantages of my invention are obvi-The same is of great convenience to physicians practicing in small districts at distances from druggists.

The invention is extremely simple, cheap, 95 and durable, and a pocket-knife thus constructed is not perceptibly increased either in weight or bulk and can be carried in the wearer's pocket as an ordinary knife. Then, again, the physician or user has the further 100 advantage of having at hand a knife ready of a long flat bar having a widened portion b', I for use for cutting purposes or for placing

powdered medicines in the scale-pan or spreading poultices and the like.

I claim as my invention-

1. The herein-described improved pocket-5 knife and scales combined, comprising the knife and the scale-beam detachably secured to the side thereof, as set forth.

2. The herein-described improved pocketknife and scales combined, comprising the 10 knife, the scale-beam detachably secured to one side thereof, the fulcrum-bar having parallel sides or ends and designed to fit over one end of said knife and hold said scale-beam, and the scale-pan inclosing said fulcrum-bar 15 and end of knife and scale-beam, substan-

tially as set forth.

3. The herein-described improved pocket-knife and scales combined, comprising the knife having a headed lug or stud and a groove or recess, the scale-beam having a slot through which said lug or stud is designed to project, the sliding poise on said beam designed to enter said groove or recess, the fulcrum-bar having parallel sides or ends and designed to fit over one end of said knife and hold said

scale-beam, and the scale-pan inclosing said fulcrum-bar and end of knife and scale-beam,

substantially as set forth.

4. The combination of the scale-beam having a widened portion, a groove or recess, and 30 a slot, the sliding poise on one end of said beam, the fulcrum bar or rest having an upper cross-bar entering said groove or recess and slot, and the scale-pan secured to said beam, substantially as set forth.

5. The combination of the scale-beam having a widened portion, a slot formed therein and a hole in one end of said beam, the sliding poise, the fulcrum bar or rest having an upper cross-bar **V** shape in cross-section and 40 provided with a central crest, and the scalepan having a lug or stud projecting from its bottom and designed to fit in said hole of the scale-beam, as set forth.

In testimony whereof I affix my signature in 45

presence of two witnesses.

EDWARD D. MILES.

Witnesses: J. H. CROUCH,

W. A. FEASTER.