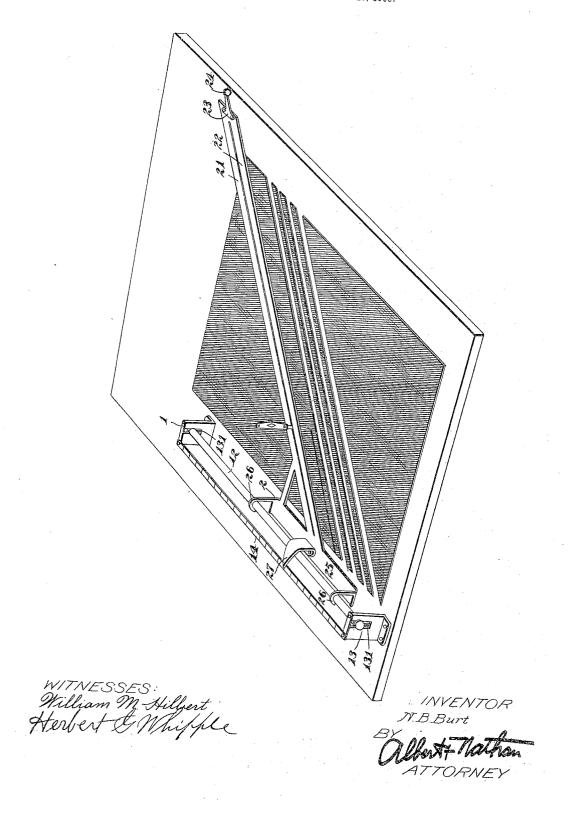
N. B. BURT.

IMPLEMENT FOR BIAS CUTTING.

APPLICATION FILED JUNE 15, 1905.



UNITED STATES PATENT OFFICE.

NEWTON B. BURT, OF NEW YORK, N. Y.

IMPLEMENT FOR BIAS-CUTTING.

No. 816,529.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed June 15, 1905. Serial No. 265,456.

To all whom it may concern:

Be it known that I, Newton B. Burt, a citizen of the United States, residing in New York city, in the county of New York and State of New York, have invented certain new and useful Implements for Bias-Cutting; of which the following is a specification.

This invention relates to improvements in appliances adapted to guide a knife in cutto ting cloth on the bias, and it refers more particularly to a means serving to cut strips of any desired predetermined width from the

fabric.

My invention has in view, among its many 15 other objects, the provision of an implement for attaining this purpose which, while most effective in operation and adaptable to the needs of dressmakers and the like in that it is capable of being readily assembled upon an 20 ordinary table or cutting surface, will be so simple and durable as to be easily made at a

It is also an object of my invention to provide a cutting implement of this nature by 25 the use of which widths of any predetermined size may be accurately gaged and cut, provision being further made whereby the cut-ting edge may be readily brought in close contact with and to any desired degree com-30 press the underlying material, which will in ordinary use be of variable thickness. Such provision is of a considerable advantage, since in cutting fabrics and other limp material it is desirable that the same be tightly 35 clamped so as not to crumple before the cutting edge.

As the invention may be more clearly described in connection with illustrations, a drawing showing a preferred embodiment is 40 appended as a part of this specification, and in such drawing like letters of reference denote corresponding parts. By such drawing is shown a general perspective of one form of my invention as used in the cutting of bias 45 strips from a piece of goods, and by reference to the same it will be noted that the invention partly comprises a traveling cutter-guide or straight-edge 2 and a suitable fixed guide 1

therefor.

In the shown adaptation the fixed guide comprises a vertically-yielding guide-rod 12, providing for an up-and-down movement of the cutter-guide end in order that the latter may accommodate itself to materials of vari-55 ous thicknesses and compress them to a suffi- 12, and as the latter is vertically yieldable a 110

cient degree to allow the knife-edge to act at a full efficiency. To provide for such movement, the guide-bar is mounted at its ends in vertically-yielding bearings 13, which consist of a plate having a slot wherein rides the ends 60 of the guide-bar 12, the latter being restrained from lateral displacement by circumferential grooves in the ends thereof, which grooves are engaged by the sides of the slot-bearings. To carry the weight of the bar and the de- 65 pendent attachments an expansible spring 131 is mounted within said slot intermediate the bar and the supporting-base, as shown in It will be clear that such conthe drawing. struction will constrain any horizontal move- 70 ment of the bar in a plane parallel to the table without interfering with a vertical elastic yield. Connecting such end pieces a scalebar 14 may be employed, serving to brace and keep the end bearing properly spaced 75 apart and by cooperation with the hereinafter-referred-to index-pointer to indicate the width of the strips cut. Such scale is preferably so subdivided that when a given width of cloth is spaced off by the knife- 80 guide the scale will indicate the exact width in English, metric, or other preferred units of measurement. It will of course be understood in this connection that whereas I have shown the scale as engraved upon its cross- 85 bar, it may likewise be conveniently engraved upon the guide 12, beginning, if desired, at an extreme end thereof, and the knife-guide having a suitable pointer operating in conjunction therewith.

The cutter-guide portion has two parallel blades 21 and 22, slightly spaced apart, so as to permit the insertion of a knife-edge therethrough. At the outer ends of such blades a connecting **T** 23 is provided, the interme- 95 diate extended arm of which is of springy material and has mounted at its extreme end a globular roller 24, so as to provide for a free movement in a direction diagonal to the axis of said roller. Through the instrumentality 100 of the spring-arm the cutter-guide has sufficient up-and-down play to allow for a considerable diversity in the thickness of the material cut. The aforesaid blades are fixed to and at an angle of approximately forty-five 105 degrees angularly extend from the supporting-frame 25, which by means of hook-like members 26 is slidably and detachably mounted upon and supported from the rod

freedom of movement is given to the frame and knife-guide extending therefrom. frame, furthermore, carries a suitable indexpointer 27, which by reference to a suitablygraduated scale 14 denotes the precise width of the strips cut.

While having thus described my invention so that the same may be understood and put into practice by all authorized by me to do 10 so, it will be understood that therein certain modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new, and desire to secure

15 by Letters Patent, is-

1. In a bias-cutting implement, a guiderod and a knife-guide slidable therealong and detachably dependent therefrom by hooklike arms.

2. In a bias-cutting implement, a cutting-20 arm mounted upon a horizontal guide-rod so as to freely slide therealong, said slide-rod be-

ing elastically supported.

3. In a bias-cutting implement, a cutting-25 arm having hook-arms detachably engaging with and slidably mounted upon a horizontal guide-rod, said slide-rod being vertically yieldable.

4. In a bias-cutting implement, a knife-30 guide supported at one extreme end by a flexible extension carrying a ball-roller at the end

thereof.

5. A bias-cutting implement having a cutting-guide horizontally movable in the plane 35 of the table and elastically supported vertically to accommodate goods of diverse thicknesses.

6. A bias-cutting implement having a cutting-guide laterally movable in parallel diag-40 onals in the plane of the table and elastically supported vertically to accommodate goods of diverse thicknesses.

7. In a bias-cutting implement, a knifeedge having an elastically-supporting roller-45 bearing at one extreme end thereof, and at the other end being dependent from a vertically-yieldable guide-rod.

8. In a bias-cutting implement, a vertically-yieldable guide-rod and detachably de-50 pendent therefrom a knife-guide supported at one extreme end by a flexible extension carrying a ball-roller at the end thereof.

9. In a bias-cutting implement, a knifeedge having a yielding roller-bearing at one 55 extreme end thereof, said knife-edge being dependent at the other end from a verticallyyieldable guide-rod and extending therefrom at an angle of approximately forty-five de-

10. In a bias-cutting implement, a fixed 60 guide comprising a scale-end bearings and a guide-rod elastically supported therein, a knife-guide carrier dependent from said rod by hook-like arms, and a knife-guide having an elongated slot extending therefrom and 65 yieldably supported at its extreme end by a roller-ball, said carrier providing an index-pointer for registering the width of cloth cut.

11. In a bias-cutting implement, a fixed guide comprising slotted end pieces, springs 7c therein, a guide-rod supported by said springs, and a knife-guide slidably mounted upon said guide-rod and having an indexpointer associated with a suitable scale upon

said fixed guide.

12. In a bias-cutter, a fixed guide member having a vertically-yieldable guide-rod elastically supported at its ends in suitable bearings and a knife-guide detachably dependent from said rod and having an index-pointer for 80 determining the width of the cut strips, said knife-guide having a yielding bearing upon its extreme end.

13. In a bias-cutting implement, a fixed guide comprising slotted end pieces, springs 85 therein, and a guide-rod vertically supported by said springs but restrained against other movement, and a knife-guide slidably mounted upon said guide-rod and having an indexpointer associated with a suitable scale upon 90 said fixed guide for determining width of

strips cut.

14. In a bias-cutter, a fixed guide member having a vertically-yieldable guide-rod supported by springs in suitable bearings at its 95 ends, a scale and a knife-guide detachably dependent therefrom having an index-pointer for cooperating with said scale in determining the width of the cut strips, said knife-guide having a yielding bearing upon its extreme 100

15. In a bias-cutting implement, a fixed guide comprising a scale, end bearings, and a guide-rod elastically supported therein, a knife-guide carrier dependent from said rod 105 by hook-like arms, and a knife-guide having an elongated slot extending therefrom and yieldably supported at its extreme end by a rollerball, said carrier providing an index-pointer for registering the width of cloth cut

NEWTON B. BURT.

Witnesses: ALBERT F. NATHAN, D. G. ABEEL.