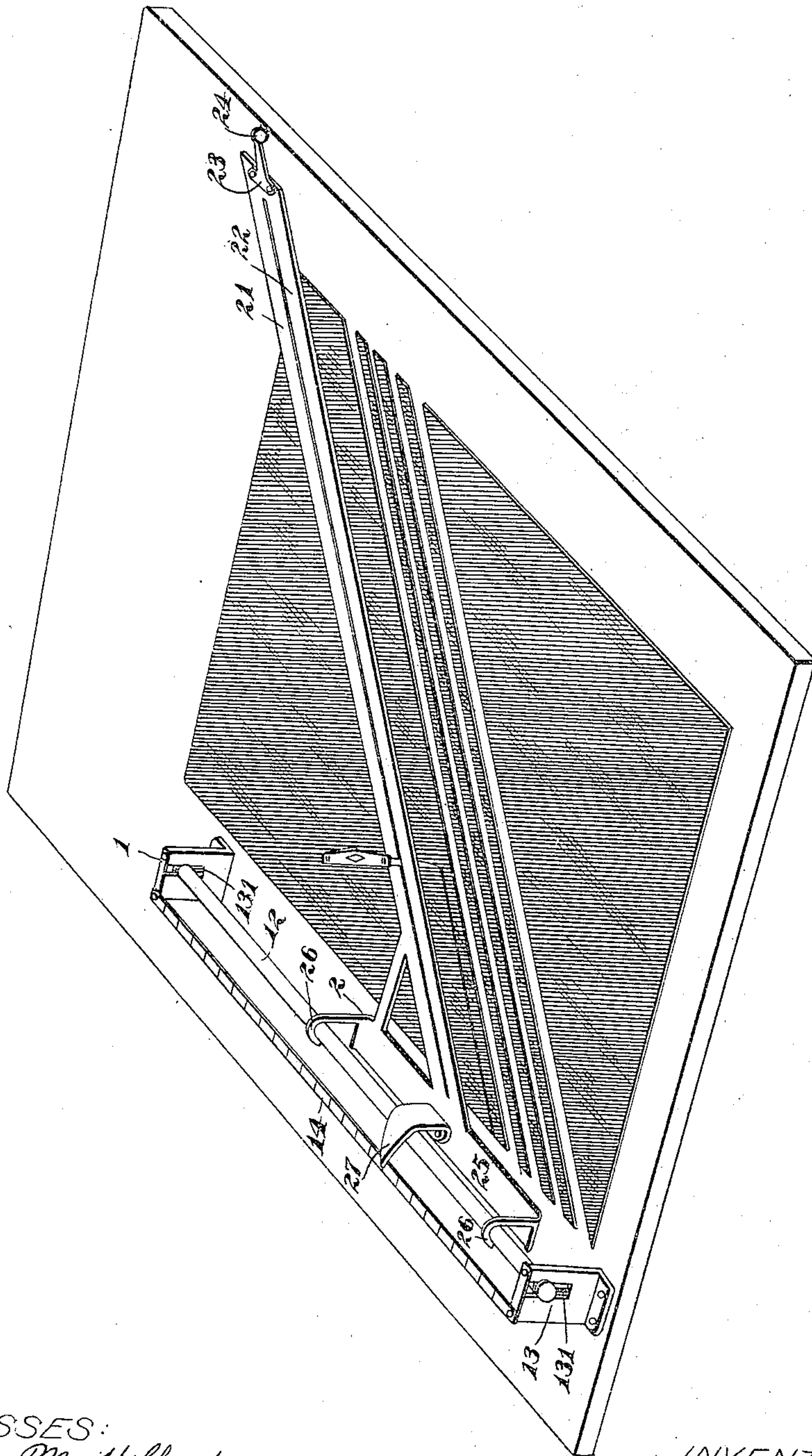


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PATENTED MAR. 27, 1906.

N. B. BURT.
IMPLEMENT FOR BIAS CUTTING.
APPLICATION FILED JUNE 15, 1905.



WITNESSES:
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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 cutting 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 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 ordinary table or cutting surface, will be so simple and durable as to be easily made at a small cost.

It is also an object of my invention to provide a cutting implement of this nature by the use of which widths of any predetermined size may be accurately gaged and cut, provision being further made whereby the cutting edge may be readily brought in close contact with and to any desired degree compress 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 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 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 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 various thicknesses and compress them to a suffi-

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 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 dependent attachments an expansible spring 131 is mounted within said slot intermediate the bar and the supporting-base, as shown in the drawing. It will be clear that such construction will constrain any horizontal movement of the bar in a plane parallel to the table without interfering with a vertical elastic yield. Connecting such end-pieces a scale-bar 14 may be employed, serving to brace and keep the end bearing properly spaced apart and by coöperation 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-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-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 there-through. At the outer ends of such blades a connecting T 23 is provided, the intermediate 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 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 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 12, and as the latter is vertically yieldable a

freedom of movement is given to the frame and knife-guide extending therefrom. Such frame, furthermore, carries a suitable index-pointer 27, which by reference to a suitably graduated 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 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 by Letters Patent, is—

1. In a bias-cutting implement, a guide-rod and a knife-guide slidable therealong and detachably dependent therefrom by hook-like arms.
2. In a bias-cutting implement, a cutting-arm mounted upon a horizontal guide-rod so as to freely slide therealong, said slide-rod being elastically supported.
3. In a bias-cutting implement, a cutting-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-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 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 diagonals in the plane of the table and elastically supported vertically to accommodate goods of diverse thicknesses.
7. In a bias-cutting implement, a knife-edge having an elastically-supporting roller-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 dependent 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 knife-edge having a yielding roller-bearing at one extreme end thereof, said knife-edge being dependent at the other end from a vertically-yieldable guide-rod and extending therefrom

at an angle of approximately forty-five degrees.

10. 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 by hook-like arms, and a knife-guide having an elongated slot extending therefrom and 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 therein, a guide-rod supported by said springs, and a knife-guide slidably mounted upon said guide-rod and having an index-pointer 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 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 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 index-pointer associated with a suitable scale upon 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 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 end.

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 by hook-like arms, and a knife-guide having an elongated slot extending therefrom and yieldably supported at its extreme end by a roller-ball, said carrier providing an index-pointer for registering the width of cloth cut.

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