Nov. 10, 1931. L. FRIEDMAN 1,831,592

DEVICE FOR MAKING TIES

Filed April 21, 1927

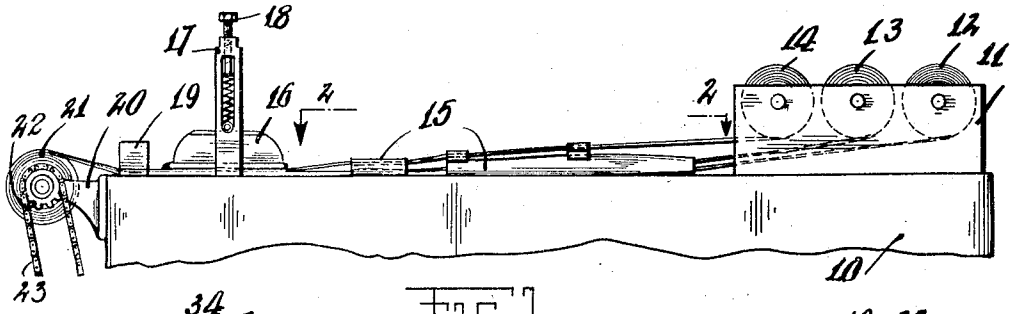

FIG. 1.

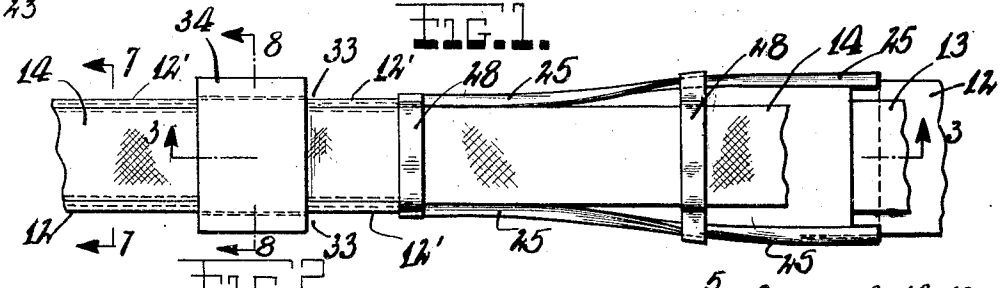

FIG. 2.

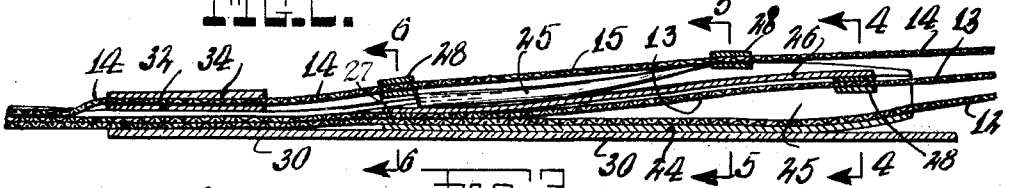

FIG. 3.

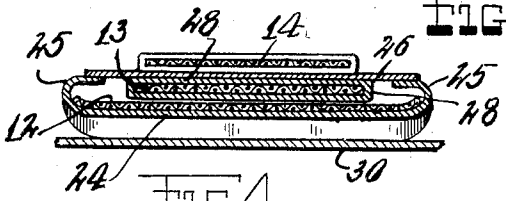

FIG. 4.

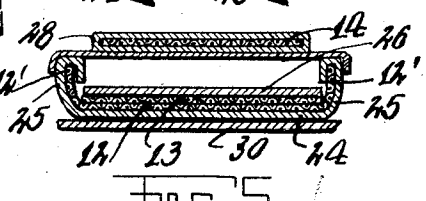

FIG. 5.

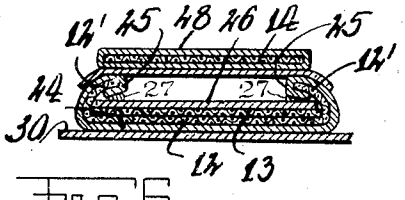

FIG. 6.

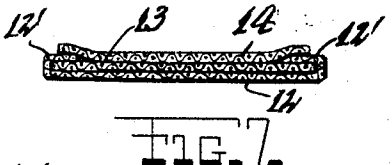

FIG. 7.

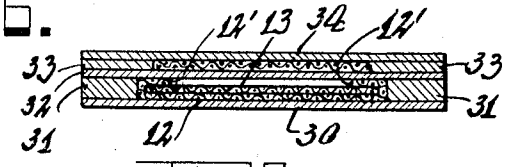

FIG. 8.

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Patented Nov. 10, 1931 1,831,592

UNITED STATES PATENT OFFICE

LOUIS FRIEDMAN, OF NEW YORK, N. Y.

DEVICE FOR MAKING TIES

Application filed April 21, 1927. Serial No. 185,476.

This invention relates generally to machinery for use in the tie manufacturing trade, and has more particular reference to a device for the manufacture of casing material used in bow ties.

The invention has for an object, the provision of a novel device for the manufacture of casing material for bow ties, which will eliminate the necessity of stitching, and which is efficient, positive and reliable in action.

For further comprehension of the invention and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings and to the appended claims in which the various novel features of the invention are more particularly set forth.

Referring to the accompanying drawings, forming a material part of this disclosure:

Fig. 1 is a side view of a device constructed according to this invention.

Fig. 2 is a fragmentary plan view thereof, seen looking in the direction of the line 2—2 of Fig. 1.

Fig. 3 is a vertical sectional view, taken on the line 3—3 of Fig. 2.

Fig. 4 is a vertical sectional view, taken on the line 4—4 of Fig. 3.

Fig. 5 is a vertical sectional view, taken on the line 5—5 of Fig. 3.

Fig. 6 is a vertical sectional view, taken on the line 6—6 of Fig. 3.

Fig. 7 is a vertical sectional view, taken on the line 7—7 of Fig. 2.

Fig. 8 is a vertical sectional view, taken on the line 8—8 of Fig. 2.

The reference numeral 10 indicates generally a support upon which is disposed a standard 11 rotatably supporting a roll of silk material 12, a roll of lining material 13, and a roll of rubberized tape 14. Guiding and folding means generally indicated in Fig. 1 by numeral 15, rests on the support 10, and bends the edges 12′ of material 12 upon the lining 13, and at the same time guiding the rubberized tape 14 upon these edges 12′ and the top of the lining 13. Ironing means, including an electric iron 16 slidably supported by bracket 17 provided with tensioning means 18, serves to heat the rubberized tape 14, causing it to become attached to the edges 12′ and lining 13, forming bow tie casing material. The support 10 also supports a guide 19 and a bracket 20. The guide 19 directs the bow tie casing material from beneath the iron 16 to a roll 21 rotatably supported by the bracket 20 and provided with a gear 22, and a driver chain 23 receiving its motion from some source not shown on the drawings.

The guiding and folding means consists of a base member 24 provided with integral U-flanges 25, and is of such width as to accommodate the material 12. These U-flanges lie flat with the base 24 for a portion of the base thereafter gradually standing up vertically, clearly shown in Fig. 5, and then doubling up upon the base as shown in Fig. 6. As the material 12 is pulled over the base 24, the said U-flanges 25 cause the edges 12′ of the material to be bent as indicated on the drawings. A separator 26 extends from one end of the base 24 to the other end, and is secured to the U-shaped flanges 25 at one end, as at 27. A guide member 28 depends from the separator 26, and the material 13 passes therethrough. The separator 26 extends beneath the doubled over U-shaped flanges, so that as the edges 12′ are formed the lining material 13 is located beneath these edges 12′. Guide members 28 are secured on top of the flanges 25 and the material 14 passes therethrough.

An auxiliary guide member for the materials leaving the base structure 24, consists of mezzanine base member 30 secured to the base 24, and provided with guide strips 31 on its top side to accommodate the materials 12 and 13, the material 12 having the bent edges 12′, a partition 32 supported across the edge members 31, upper guide strips 33 to accommodate material 14 supported on the partition 32 and a top cover 34 supported on the upper guide strips 33. The auxiliary guide member functions to hold the edges 12′ folded in place and the rubberized tape thereupon, so that the ironing means acts to properly fasten the parts together.

While I have illustrated and described the preferred form, construction and arrange-

ment of the several elements employed, it will be understood that the device is, nevertheless, susceptible of considerable modification therein, and I therefore reserve the right and privilege of resorting to all such changes as may be fairly embodied within the spirit and scope of the invention as claimed.

Having thus described my invention, what I claim as new and desire to secure by United States Letters Patent is:

1. In a device for making ties without the use of stitching, a base member provided with integral U flanges lying flat with the base for a portion thereof, thereafter gradually standing up vertically, the remaining portion of said base member then doubling upon itself so that material upon being pulled over the base has its edges bent inwardly, a separator secured to one portion of the flanges and extending beneath the doubled over portion of the flanges so as to cause lining material fed beneath the separator to be disposed, beneath the bent edges of the first mentioned material, ironing means, a guide member for directing said first mentioned material with the lining therein and rubberized tape from said base member and said separator, to said ironing means, said guide member comprising a mezzanine base member, guide strips extended along the top of the mezzanine base member, a partition supported across the guide strips forming a passage between the mezzanine base member and the partition for the first mentioned material, upper guide strips extended along the top of the partition, and a top cover supported on said upper guide strips forming a passage between the top cover and the said partition for the rubberized tape.

2. In a device for making ties without the use of stitching, a base member provided with integral U flanges lying flat with the base for a portion thereof, thereafter gradually standing up vertically, the remaining portion of said base member then doubling upon itself so that material upon being pulled over the base has its edges bent inwardly, a separator secured to one portion of the flanges and extending beneath the doubled over portion of the flanges so as to cause lining material fed beneath the separator to be disposed beneath the bent edges of the first mentioned material, ironing means, a guide member for directing said first mentioned material with the lining therein and rubberized tape from said base member and said separator, to said ironing means, said guide member comprising a mezzanine base member, guide strips extended along the top of the mezzanine base member, a partition supported across the guide strips forming a passage between the mezzanine base member and the partition for the first mentioned material, upper guide strips extended along the top of the partition, a top cover supported on said upper guide strips forming a passage between the top cover and the said partition for the rubberized tape, and means to draw the said materials through said folding and guide means and beneath said ironing means.

In testimony whereof I have affixed my signature.

LOUIS FRIEDMAN.