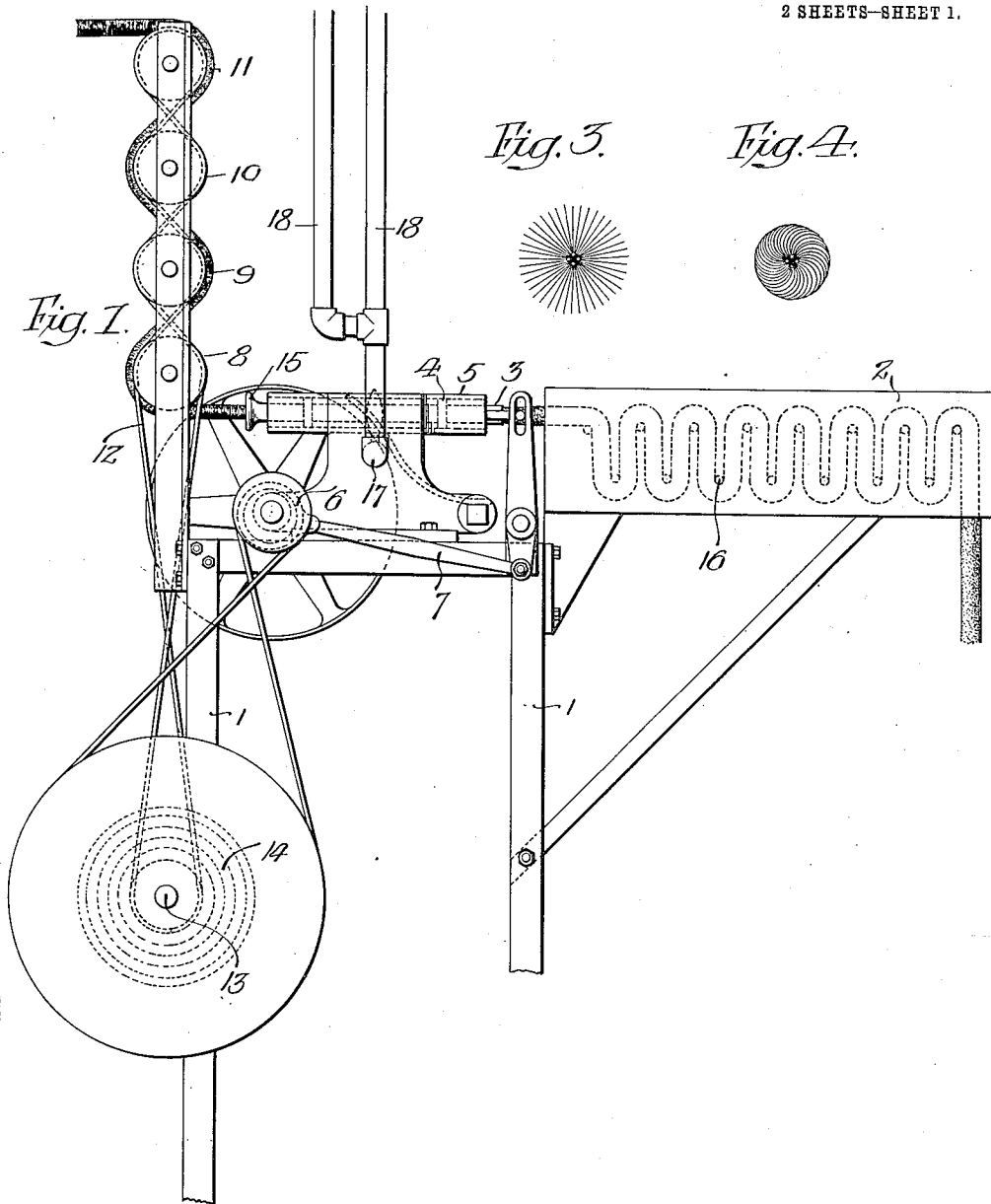


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Patented June 17, 1913.

2 SHEETS—SHEET 1.



Witnesses—  
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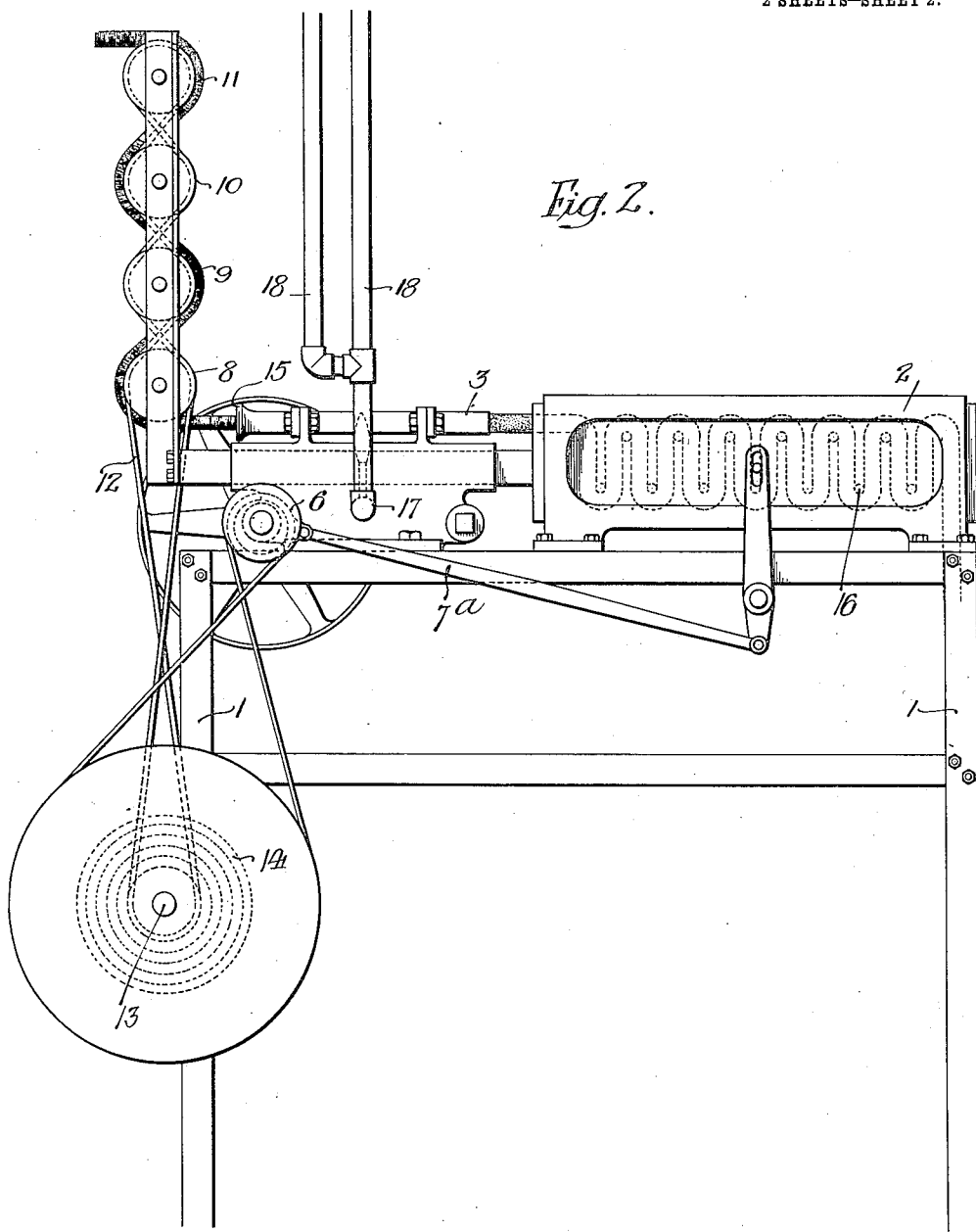
Inventor—  
 Leon Goodman.  
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# UNITED STATES PATENT OFFICE.

LEON GOODMAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO ISAAC H. GOODMAN, LEON GOODMAN, AND JOSEPH HINLEIN, TRADING AS GOODMAN BROS. & HINLEIN, OF PHILADELPHIA, PENNSYLVANIA.

## APPARATUS FOR MAKING CHENILLE TRIMMING.

1,065,235.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed January 9, 1912. Serial No. 670,192.

*To all whom it may concern:*

Be it known that I, LEON GOODMAN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented an Improved Apparatus for Making Chenille Trimming, of which the following is a specification.

My invention relates to the manufacture of chenille braid, and it consists of improved mechanism for making a novel form of braid from ordinary chenille, all as more fully set forth in the following specification, reference being had to the accompanying drawings, in which:

Figure 1, is a side elevation of one form of apparatus in which the improved process may be carried out; Fig. 2, is another form of apparatus in which the improved process may be carried out, and Figs. 3 and 4, are views illustrating the chenille before and after treatment.

The purpose of the mechanism forming the subject of my invention is to effect the transformation of ordinary chenille into an improved form of braid having a unique and pleasing appearance. To accomplish this transformation, the chenille, of ordinary character, is fed through tubular guideways which are heated, and either the chenille or the tubular guideways are reciprocated in line with the movement of the chenille so that the chenille weft, which is normally disposed radially with respect to the warp or binder, is given a twist or curve; transforming the ends from their normal radial disposal with respect to the warp core to a curved or spiral condition. Such condition appears to be imparted to the chenille by the ironing operation effected by movement of the chenille with respect to the tubes, or the movement of the tubes with respect to the chenille, and from whatever cause, it imparts to the finished product a pleasing effect not attainable with other processes of manufacture.

The structure shown in Fig. 1, comprises a frame or support 1 having suitable tension guiding means 2 for chenille, (which may be of the character illustrated in Fig. 3); such chenille being passed to tubular guides 3, carried by a suitable frame 4, slidable in ways 5, and reciprocated by an ordinary eccentric 6, with a rod or bar 7

connecting the same and the frame 4 carrying the tubular guideways. From the tubular guideways, the chenille is carried off by means of a plurality of friction or tension rolls 8, 9, 10 and 11, which may be driven by a suitable belt 12 from a main driving shaft 13; the latter having a graduated pulley 14 so that various speeds may be imparted to said friction rolls; such drawing off imparting the necessary feed of the chenille through the tubular guides 3. The ends of the tubular guides 3 are flared or bell-mouthed, as indicated at 15 in the accompanying drawings; such construction being desirable in carrying out the operation of transforming the chenille to the improved braid forming the subject of my invention. This flaring or belling of the delivery ends of the tubular guides is desirable in order that no injury may be imparted to the finished braid due to movement of the latter with respect to said tubular guides, or movement of said guides with respect to the chenille, in the operation of transforming the same into the improved braid.

Instead of moving the tubular guides, the same may be stationary, and the tension device 2 for the chenille having bars 16 around which the chenille is passed may be connected to the frame carrying the friction or tension rolls 8, 9, 10 and 11, and the whole reciprocated with respect to the stationary tubular guides so as to impart movement to said chenille with respect to said guides, independently of the feed. In such instance, the said tension guiding means will be connected with the eccentric by a bar 7<sup>a</sup> as shown in Fig. 2, so that it will be moved longitudinally in the line of draft instead of moving the tubular guides. The tubular guides may be heated by suitable means; for instance, a pressure gas burner 17 may be employed, fed with gas from any suitable supply, via the pipes 18. The effect of passing the chenille through the tubular heated guideways, which are in effect "irons," is to transform the radially disposed wefts normally lying in the position shown in Fig. 3, to the curved condition shown in Fig. 4, and substantially without affecting in any way the radial disposition of such wefts; the ironing operation simply curving the

same and the accompanying heat causing the said wefts to retain the curved condition.

In the use of either form of apparatus 5 shown, substantially the same result will be obtained; that is to say, the chenille will be subjected to an ironing treatment while undergoing a feeding movement, which combined operations curve the ends of the 10 weft; producing, in each instance, braid of the character illustrated in Fig. 4.

The apparatus is driven at such a rate of speed as to insure that the chenille may be subjected to the ironing operation for 15 the desired length of time.

I claim:

1. The combination, in a machine for treating or transforming chenille, of means for feeding chenille, a plurality of elements for 20 acting upon the chenille, one of said elements imparting tension thereto and the other element effecting an ironing operation, and means for imparting movement to one of said elements independently of the normal feed of the chenille. 25

2. The combination, in a machine for treating or transforming chenille, of a frame, a chenille tension device, a tubular guideway for the chenille, means for heating the guide- 30 way, and means for reciprocating said guideway during the feed of the chenille.

3. In a machine for treating or transforming chenille, a tubular guideway having a flaring delivery end through which the che-

nille is passed, means for heating said guide- 35 way, and means for effecting movement relatively between said chenille and guideway.

4. The combination, in a machine for treating or transforming chenille, of means for 40 feeding the chenille, a tubular guideway therefor, means for heating the latter, means for effecting movement relatively between said chenille and the tubular guideway independently of the normal feed of the che- 45 nille, and means for continuously drawing off the finished product from the tubular guideway.

5. The combination, in a machine for treating or transforming chenille, of a frame, 50 tension means for the chenille, a tubular guideway through which the chenille is passed, means for heating the chenille while in said guideway, means for reciprocating 55 said guideway during the feed of the chenille, and a plurality of tension or friction rolls for continuously drawing off the finished product from the tubular guideway and imparting the desired feed to the che- 60 nille.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

LEON GOODMAN.

Witnesses:

MURRAY C. BOYER,  
JOS. H. KLEIN.