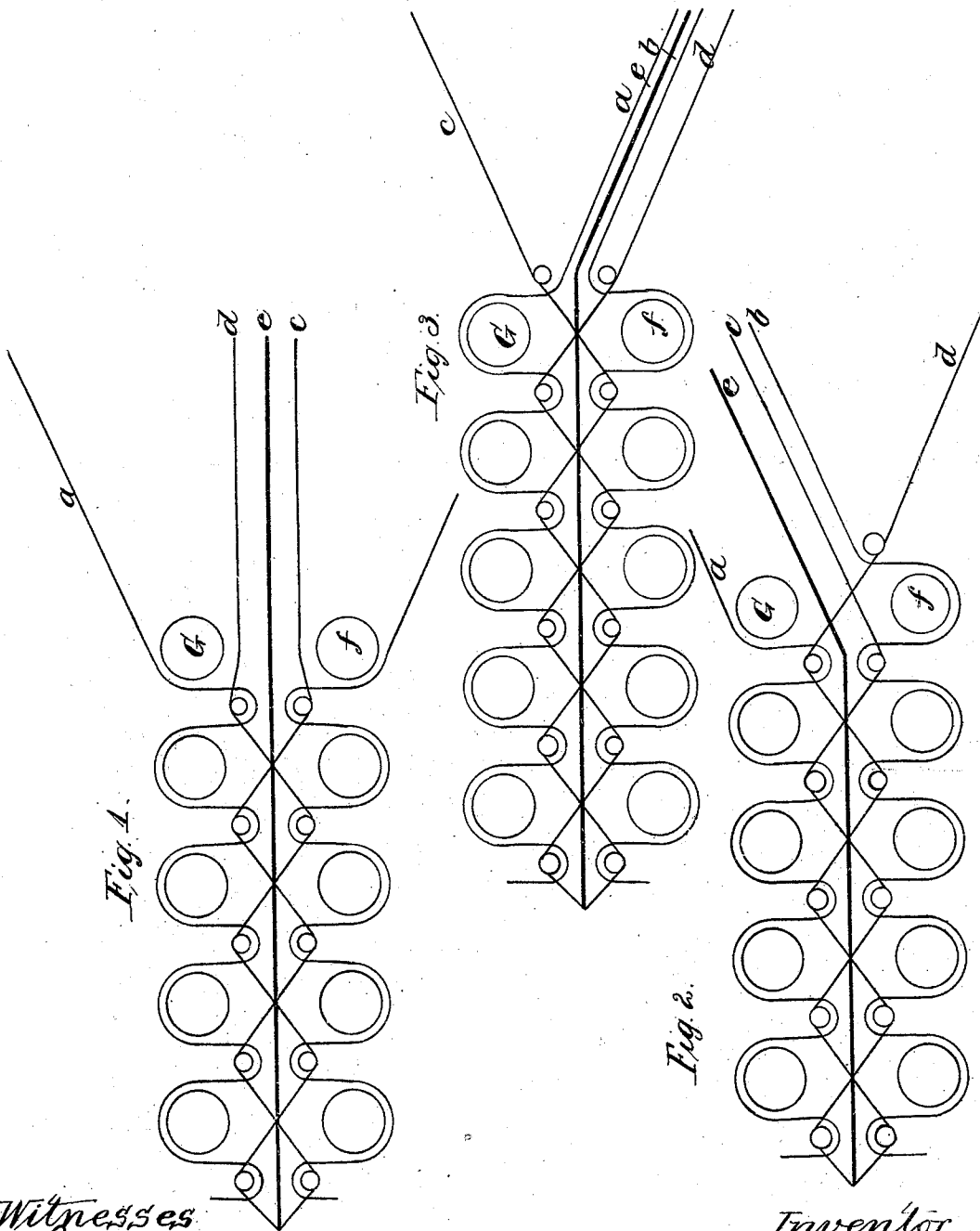


G. Crompton.

Carpet.

N^o 111,325.

Patented Jan. 31, 1871.



Witnesses

J. Albare
H. A. Howard.

Inventor,

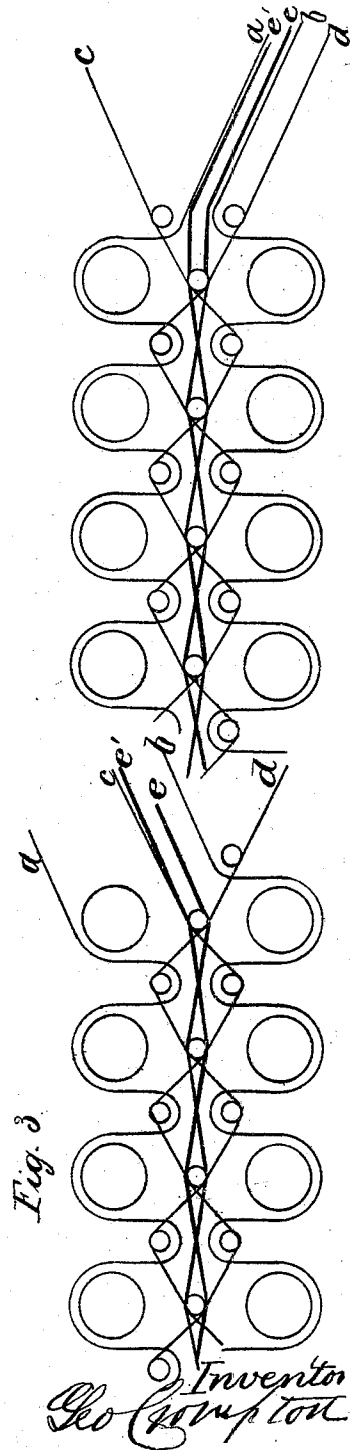
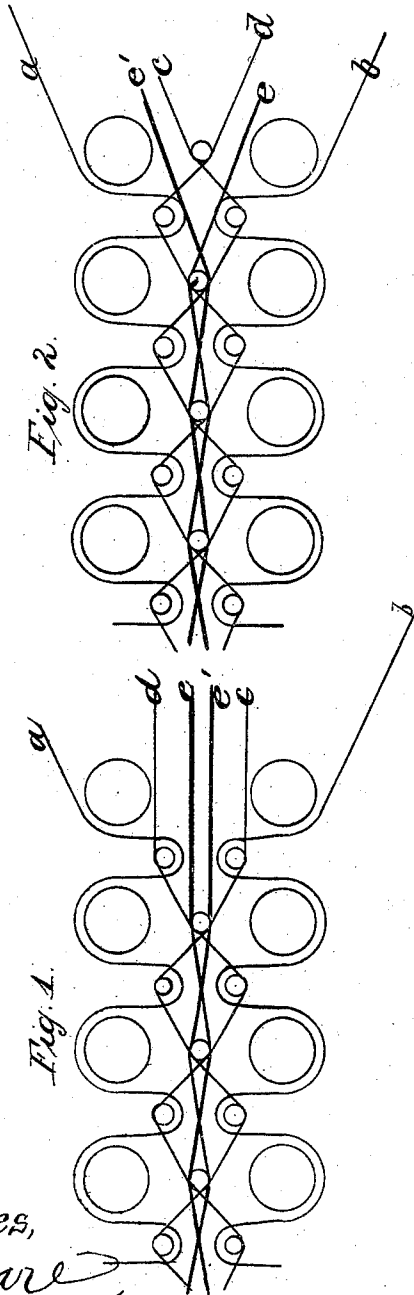
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Albion
Howard.

Inventor
Geo Crampton

United States Patent Office.

GEORGE CROMPTON, OF WORCESTER, MASSACHUSETTS.

Letters Patent No. 111,325, dated January 31, 1871.

IMPROVEMENT IN CARPETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE CROMPTON, of the city and county of Worcester and State of Massachusetts, have invented a new and useful article of manufacture, viz., a Double-faced Tapestry Carpet; and that the following, taken in connection with the drawing, is a full, clear, and exact description thereof.

The drawing is a longitudinal section, showing the collocation of the threads which form the carpet, and also the pile-wires in place in the fabric. They are not intended to represent the threads as of the proper size, or as driven up in a finished carpet, but are intended to aid in defining the character of the fabric and the preferred manner of making the same.

By tapestry carpet I mean a pile carpet in which the figure is formed by means of a parti-colored warp, or, in other words, a warp each of whose threads is printed or dyed of different colors, the colors and their relative positions being so adjusted that when the warps are woven they shall produce the required figure without any aid from a Jacquard or any of its substitutes or equivalents. Such carpets, with a single face or with a pattern on one side only, are now common, and when the pile is uncut are sometimes called tapestry Brussels; when the pile is cut they are usually called tapestry velvets. These carpets, owing to the fact that all the printed warps show at each pick, and, consequently, that comparatively few warp-threads are used, are not so thick and elastic, feeling when tread upon, as Brussels or Wilton carpets, and consequently wear out sooner.

By my invention I have remedied this defect, and have, at the same time, made the carpet reversible, so that it may be turned when partially worn, being, in this respect, like the ingrain, and this feature much increasing the duration of the carpet.

I make these carpets of a stuffing-warp, a linen or binding-warp, and of two printed or color-warps, one for each face, and of weft threads, and I prefer to mount the loom with five harnesses (or five leaves) or frames of heddles.

One frame contains and governs the warp marked *a* on the drawing, being the upper color-warp, or the warp forming the pattern and upper surface (as woven) of the carpet.

Another frame contains *b*, the lower color-warp, or warp forming the pattern and lower surface (as woven) of the carpet. These warps may be wound on the same or separate beams; I prefer the latter.

Another, or third frame, contains and governs one-half of the linen warp, being that portion marked *C* in the drawing.

A fourth frame contains and governs the other half of the linen warp, marked *d* in the drawing; and

A fifth frame contains and governs the stuffing-

warp, marked *e* in the drawing, and with the warps thus drawn through the heddles the fabric may be woven, as follows:

First, the warp *a*, see fig. 1, is raised into the upper plane of the shed, warps *c*, *d*, and *e* are held in the central plane, and *b* is lowered into the lower plane of the shed, this being the disposition of the warps shown at the right-hand end of fig. 1, and forming two semi-sheds.

Two pile-wires, *f* and *g*, are now inserted and driven up to the fell of the fabric by the reed.

Second, the warps *c*, *b*, and *e* are all raised to the upper plane; *a* remains up and *d* is depressed into the lower plane, and a pick of weft-thread is then shot, see right-hand end of Figure 2.

Third, *c* remains up and *d* down, and *a*, *b*, and *e* are lowered into the lower plane; another pick of weft-thread is then shot, see right-hand of Figure 3.

Fourth, such harnesses are moved as will bring all the warps again into the first position, and pile-wires are again inserted.

Fifth, such harnesses are moved as will bring the warps into the planes as in the second position, save that warps *c* will be down and *d* up; then a pick of weft-thread is thrown.

Sixth, the warps are caused to assume the third position, except that *c* will be down and *d* up; then a pick of weft-thread is thrown.

Seventh, the warps are again as in position first, and all the other positions repeat themselves till the carpet is woven.

When the carpet is thus made there will be a pattern and a pile on each side thereof. The patterns may be the same or different. The wires are to be drawn, and the pile may be cut by the aid of a knife on the end of the pile-wire, as is well understood in cutting pile fabrics, or left uncut, as desired.

The same carpets may be woven with all the warps either up or down at each pick, and one pile-wire only placed at a time; or it may be woven with two shuttles and shuttles and two picks of weft-thread thrown at the same time, one above and one below the stuffing-warp in the central plane. I also intend at times to shoot additional picks of weft-thread between the rows of loops, and I further intend, at times, to add an additional frame of harness or leaf of heddles and divide the stuffing-warp, so that each half thereof shall be governed by a different leaf of heddles, and when the loom is thus mounted I intend to make one or more sheds of the stuffing-warp after the two pile-wires are placed, and before the next two are placed, and throw a weft-thread through the stuffing-warp, the halves of the stuffing-warp being marked *c* *e*, and sheet second contains drawing illustrating the same.

The carpet thus woven will be stronger and thicker

than that of which it is a modification, and the stuffing-warp becomes, for the first time, something more than a mere filler.

My carpet, when woven either with more or less picks of weft-threads for the linen and color-warps between the rows of loops, or with or without weft-threads and a shed of the stuffing-warp will always have the following characteristics, viz:

First, two parti-colored or printed warps, one for the upper the other for the lower face of the finished fabric, each forming a pile.

Second, a linen or binding-warp.

Third, a stuffing-warp.

Fourth, weft-threads.

Fifth, a pile on both sides or faces, either cut or uncut, or partially cut and partially uncut, although I have stated that the color-warps are one for the upper, the other for the lower face of the finished fabric.

I claim as of my own invention—

1. As an article of manufacture, a carpet made up of two parti-colored warps, a linen warp, a stuffing-warp, and weft-threads, when the same is so composed, substantially as specified, that the fabric has a pile either cut or uncut, or partially cut and partially uncut, upon both faces.

2. As an article of manufacture, a carpet presenting a pile either cut or uncut, or partially cut and partially uncut, upon both sides thereof, when the same is composed, substantially as specified, of two parti-colored warps, a linen warp, a stuffing-warp, and weft-threads, some of which latter are shot between sheds formed of the stuffing-warp, substantially as described.

GEO. CROMPTON.

Witnesses:

J. A. WARE,

F. A. HOWARD.