## B. WEIAND. Carpet Fabric.

No. 205,708.

Patented July 2, 1878.

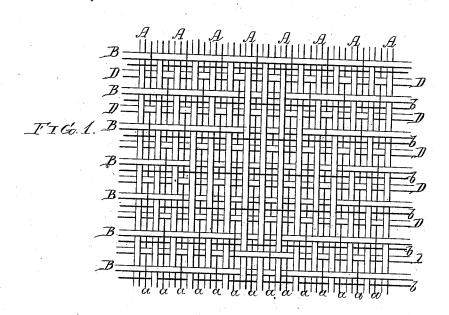
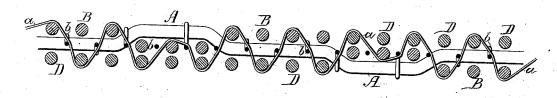
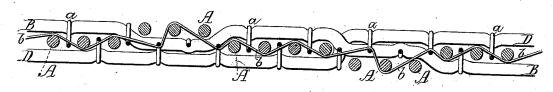


FIG.2.



TIG.3.



Witnesses John M. Humes Thomas M. Ilvain

Benjamin Neiand by his attorneys Howton and ton

## UNITED STATES PATENT OFFICE.

BENJAMIN WEIAND, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH WHITELEY, OF SAME PLACE.

## IMPROVEMENT IN CARPET FABRICS.

Specification forming part of Letters Patent No. 205,708, dated July 2, 1878; application filed January 28, 1878.

To all whom it may concern.

Be it known that I, BENJAMIN WEIAND, of Philadelphia, Pennsylvania, have invented a new and useful Improvement in Carpet Fabrics, of which the following is a specification:

The object of my invention is to produce a cheap carpet fabric, into the pattern of which a greater number of colors may be introduced than usual; and this object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a diagram illustrating my invention; Fig. 2, an exaggerated longitudinal section of the fabric, and Fig. 3 an exaggerated transverse section of the same.

In making my improved carpet fabric I employ one set of thick figuring-warps, A, one set of fine binding-warps, a, two sets of thick figuring-wefts, B and D, and one set of fine binding-wefts, b.

The warp-threads A and wefts B and D are combined in the manner shown clearly in Figs. 2 and 3. Thus, in Fig. 2 it will be observed that the warp-thread A appears both upon the face and back of the fabric at different points, while at other points it is embedded between the two wefts, which are also changed from one surface to the other.

It will be understood that the relation of the warps A and wefts B and D to each other is governed by the demands of the pattern and the single or double faced character of the carpet which is to be produced.

The figuring weft-threads B and D are bound

together by the fine warps a, and the figuringwarps A by the fine wefts b; and in order to firmly bind the warps A and wefts B and D together, so as to make the fabric strong and durable, the warps a and wefts b are interlocked, in the manner shown in Figs. 2 and 3.

In the above-described carpet both the warp and wefts appear on the surface, so that a greater diversity of colormay be introduced into the pattern than where the pattern is formed solely by the warps or the wefts, and, owing to the fact that but one set of figuring-warps is used, the Jacquard machine may be made simpler and lighter than when two sets of such warps are employed. Moreover, the weft or filling threads are much less expensive than the warp-threads, and the cost of my improved carpet is thereby considerably decreased.

I do not desire to claim, broadly, a carpet fabric in which the pattern is formed by both the warp and weft threads, as such a fabric has been made previous to my invention; but

I claim as my invention—

A carpet fabric in which are combined figuring-warps A, figuring-wefts B and D, fine binding-warps a, and fine binding-wefts b, all substantially as specified.

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

BENJAMIN WEIAND.

Witnesses:

HARRY A. CRAWFORD, HARRY SMITH.