No. 649,686.

Patented May 15, 1900.

R. A. BREUL. CARPET STAPLE.

(Application filed July 25, 1899.)

(No Model.)

Fig. 1.

B
C
B
D
A
A

Fig. 2.

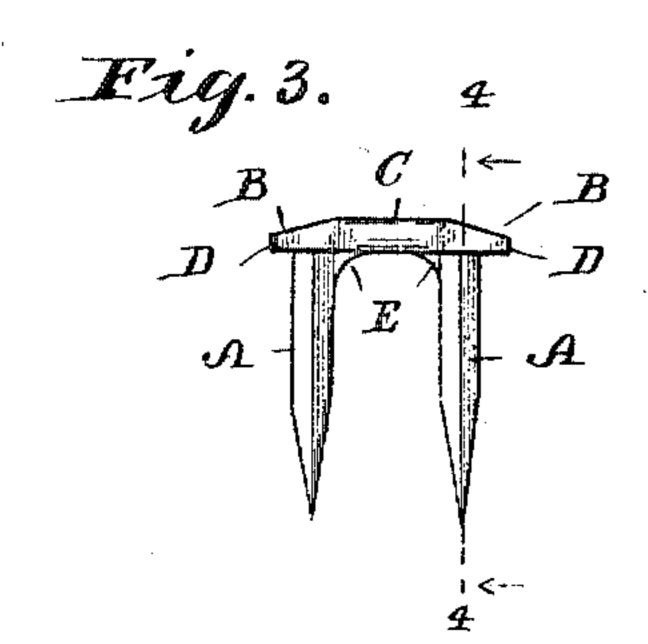


Fig.4.

E
A

Fig. 5.

D

A

A

Witnesses.

Inventor.

St. H. Ruman.

By-Chamberlain & Newmon

Attorneys

UNITED STATES PATENT OFFICE.

RICHARD A. BREUL, OF BRIDGEPORT, CONNECTICUT.

CARPET-STAPLE.

SPECIFICATION forming part of Letters Patent No. 649,686, dated May 15, 1900.

Application filed July 25, 1899. Serial No. 725,028. (No model.)

To all whom it may concern:

Be it known that I, RICHARD A. BREUL, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and 5 State of Connecticut, have invented certain new and useful Improvements in Carpet-Staples, of which the following is a specification.

This invention relates to new and useful improvements in wire staples, and more particularly to that class used for securing car-

pets to a floor.

It is the object of my invention to improve upon staples of the above class by providing the same with an enlarged head or yoke, whereby a more rigid construction of the staple and a firmer and larger engagement of the carpet is secured, as will later be more particularly described.

I preferably produce the staples in question from a single piece of metal wire similar to that used in the production of small nails, &c., and by a series of cutting, bending, and swaging operations said staples are formed into the desired shape and drop from the machine

25 in their completed state.

With the above objects in view my invention resides and consists in the novel construction shown in the accompanying drawings, forming a part of this specification, upon which similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a perspective view of my preferred form of carpet-staple. Fig. 2 is a bottom plan view of Fig. 1. Fig. 3 is a side elevation of the construction shown in Figs. 1 and 2. Fig. 4 is a vertical cross-section taken on line 44 of Fig. 3. Fig. 5 is a side elevation of a staple having a slightly-modi-

40 fied form of head.

As before stated, the tack is made from wire taken from a reel. The blank is first severed from the supply, after which the driving-points A A are swaged into shape. Said points may be either round or rectangular in cross-section, as desired, since it requires but a different shape of the dies which form them to produce either one. The end portions B

of the yoke C of the staple are next operated upon and spread out beyond the shank por- 50 tion A, before mentioned, to form the overhanging heads. In this connection it will be noted that the heads are not only spread to each side of the shank, but that they are also extended outward from the ends of the yoke, 55 as at D, and form continuous shoulders all around the tops of said shanks. The central portion G of the yoke or head of the staple is preferably round, being left in the original shape of stock, as shown in Figs. 1 and 3, or 60 it may be wholly or partially flattened, as shown in Fig. 5. I further form within the corner or angular bend at the joining of the shank and yoke a web E, which is designed to stiffen and strengthen the staple when com- 65 pleted. Said flange is rounded sufficiently to not injure the threads of the carpet.

It will be obvious to those skilled in the art that with a staple constructed as above, having continuous heads, a better engagement 70 with the carpet is provided than by the present form of staple now upon the market. The same advantage is also procured if it becomes desirable to take up the carpet, as a greater purchase for the extracting instrument is 75 permitted. It is also apparent that I have hereby produced a staple which is strongest where most desirable and needed—that is, in the joint of the yoke and shanks. The headed portions and webs render these joints or 80 bends exceedingly rigid, and therefore my staple cannot unbend and be rendered useless by driving or extracting, avoiding a very prominent and annoying defect common to all present staples made of round or flattened 85 wire.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. As an article of manufacture, a wire sta- 90 ple having the material in the bends between cross-bar and shanks upset and forced outward to produce the head extension D overlapping the shanks on all sides.

2. As an article of manufacture, a wire staple having bracing-ribs diagonally across the

angles formed at the intersection of the shanks and the cross-bar, the metal contained at said intersecting portion being upset to produce said ribs and also headed portions which overlap the shanks.

3. As a new article of manufacture, a wire staple having bracing-ribs located in the bends formed by the cross-bar and shanks and provided with a projection on the shanks form-

ing with said cross-bar a complete head over- 10 lapping said shanks on all sides.

Signed at Bridgeport, in the county of Fair-field and State of Connecticut, this 21st day of July, A. D. 1899.

RICHARD A. BREUL.

Witnesses:

C. M. NEWMAN, HARVEY W. CHAPMAN.