No. 742,700. PATENTED OCT. 27, 1903.

F. MAUSSNER.

INTERLOOPED FABRIC.

APPLICATION FILED DEC. 22, 1902.

NO MODEL.

Fig. 1.

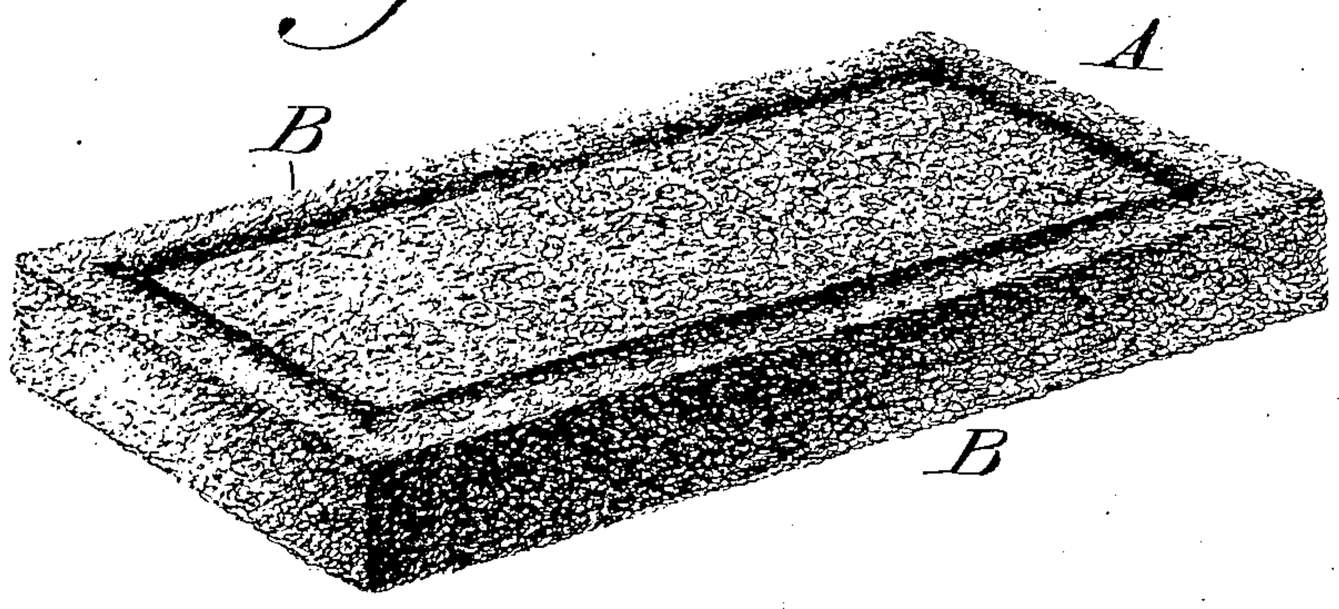


Fig. 2.

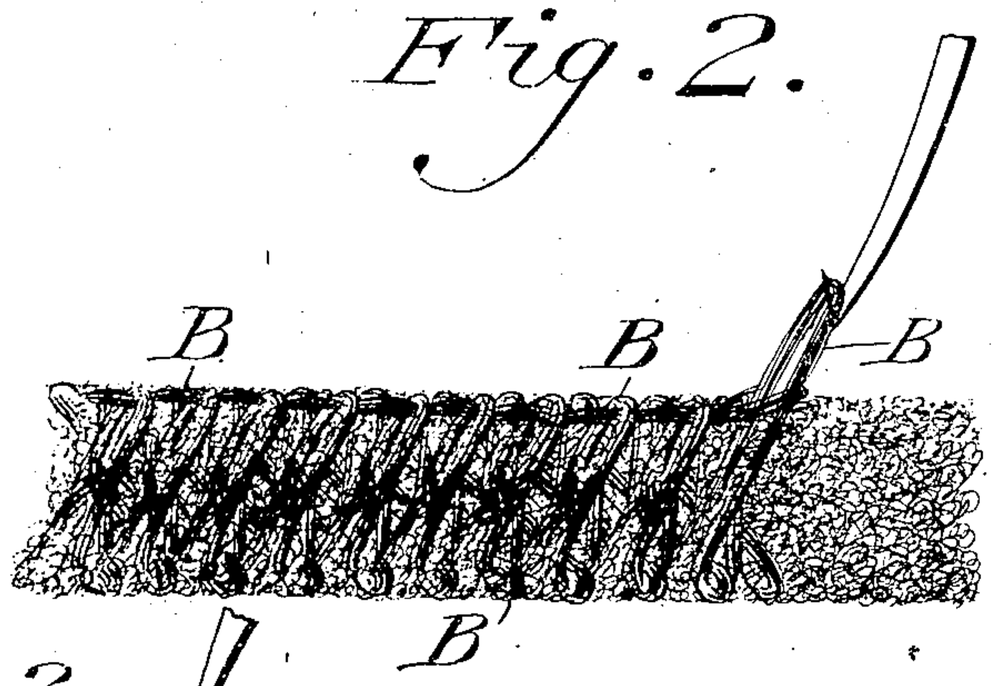
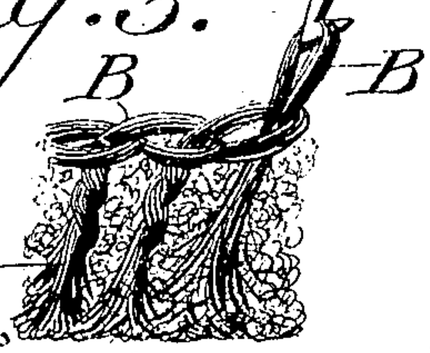


Fig. 3.



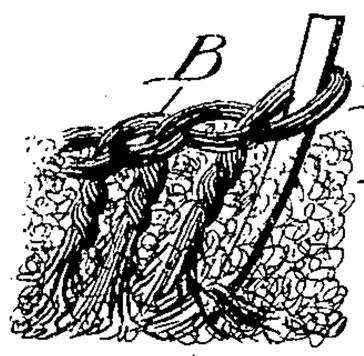


Fig. 4.

Witnesses

P. F. Eagle.

C. L. McVay.

Inventor

Friedrich Maussner.

By Dodersheim & Fairbanks.

Attorneys

No. 742,700. Patented October 27, 1903.

UNITED STATES PATENT OFFICE.

FRIEDRICH MAUSSNER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO AMERICAN INTERLACED HORSE COLLAR COMPANY, A CORPORATION OF NEW JERSEY.

INTERLOOPED FABRIC.

SPECIFICATION forming part of Letters Patent No. 742,700, dated October 27, 1903.

Application filed December 22, 1902. Serial No. 136,189. (No model.)

To all whom it may concern:

Be it known that I, FRIEDRICH MAUSSNER, a subject of the Emperor of Germany, (having resided in the United States over one year last past and having declared my intention of becoming a citizen thereof,) residing in the city and county of Philadelphia, State of Pennsylvania, have invented new and useful Improvements in Interlooped Fabrics, of which the following is a specification.

The object of this invention is an article of manufacture adapted more particularly for pads, sweat-cloths, riding-housings, sheets, mats, or other fabrics for use on animals and parts of harness.

Figure 1 represents a perspective view of a pad of interlooped fabric embodying my invention. Fig. 2 represents a side elevation of a portion of the pad, on an enlarged scale, including the first step of the mode of manufacturing said pad. Figs. 3 and 4 represent successive steps of operation following that shown in Fig. 2.

Similar letters of reference indicate corresponding parts in the figures.

Referring to the drawings, A designates a pad which is formed of loops B of fiber, the said loops being interlooped one with the other, and thus connected.

Now by the present improvement there is formed a durable, strong, and porous pad, the constituent parts of which are so massed, stiffened, and interlooped with each other as to be self-sustaining and without danger of coming apart when put in use.

In order to produce the desired article, there is used animal or vegetable fibrous material—such as hair, wool, or the like—either curled, crinkled, or in a natural state and either long or short, or short fibers mixed with long fibers of either kind. The fibers are interlooped and massed together to form a homogeneous article requiring no further binding or covering to maintain the shape of the article when used. The fibrous material is first passed through the ordinary process of picking or carding to form a loose layer or sheet of fibrous material, and several such layers are placed one on the top of the other until the desired thickness is obtained, forming a body, and the fibers of the pad are then interlooped with each other by hooks or needles passed into the layers or mass to engage some of the fibers and draw the same through each other as loops to completely connect the fibers with each other. After a loop is formed (see Fig. 2) the needle is turned so as to twist the loop. (See Fig. 3.) Then the hook or needle is lowered through said loop into the body and turned so that when the needle is again raised it will take hold of a fresh quantity of fibrous material of the body and raise the same, converting it into a loop similar to that shown in Fig. 2, when the last-named loop is twisted and the previously-named operations are repeated. After the twisted loops are formed in the body in one direction the body is turned and the looping continued at a right angle to the loops previously formed. Then the body is inverted, and the twisted loops are formed in the body in what was previously the bottom, the body thereafter being turned so that the looping is continued at a right angle to the previous operation, and so the work continues throughout the body. Each hook in taking hold of a portion of a fiber as a loop and twisting it and drawing it through an adjacent loop which is also twisted insures a complete interlooping of such fibers, and as all or nearly all the fibers are treated in this manner they are matted and interlooped firmly together, thus forming a very strong article, which at the same time is sufficiently porous for the passage of air.

By the method described a mat, sheet, or pad is produced composed of fibers only and in which the fibers are so thoroughly interlooped that no further covering is required to hold the fibers in place, and at the same time the mat, sheet, or pad thus formed can be readily cut to give the desired shape to the article. The mat, sheet, or pad produced and the article manufactured therefrom are sufficiently porous to readily absorb all moisture or sweat and allow air to circulate through the pores to the part of the animal with which the article is in contact.

Stitches C may be passed through the pad to prevent improper spreading of the latter, said stitches being shown in Fig. 1.

It is evident that from the pads or sheets produced any desired article, irrespective of shape, length, width, or thickness, may be readily manufactured.

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

1. As an article of manufacture, a fabric formed in part of twisted loops of unspun fabric interlocked with each other.

2. As an article of manufacture, a fibrous fabric, a portion of which is in the form of interlocked twisted loops.

3. As an article of manufacture, a fibrous fabric, the surface of which is in part composed of interlocked twisted loops which extend into the body thereof.

FRIEDRICH MAUSSNER.

Witnesses:

JOHN A. WIEDERSHEIM,

S. R. CARR.