

H. A. EICHORN.
HEMSTITCHER DISK.
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919,706.

Patented Apr. 27, 1909.

Fig. 1.

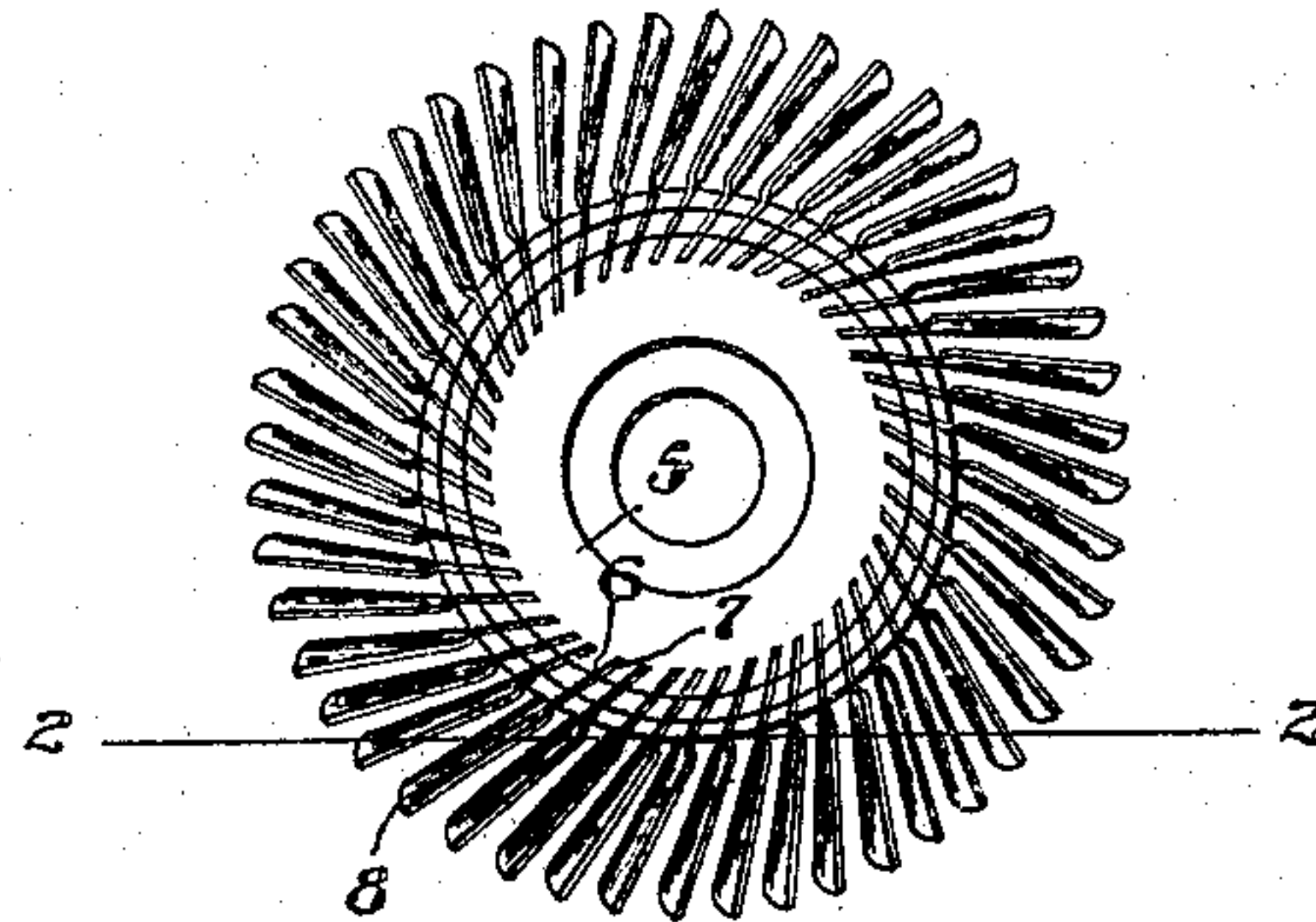


Fig. 2.

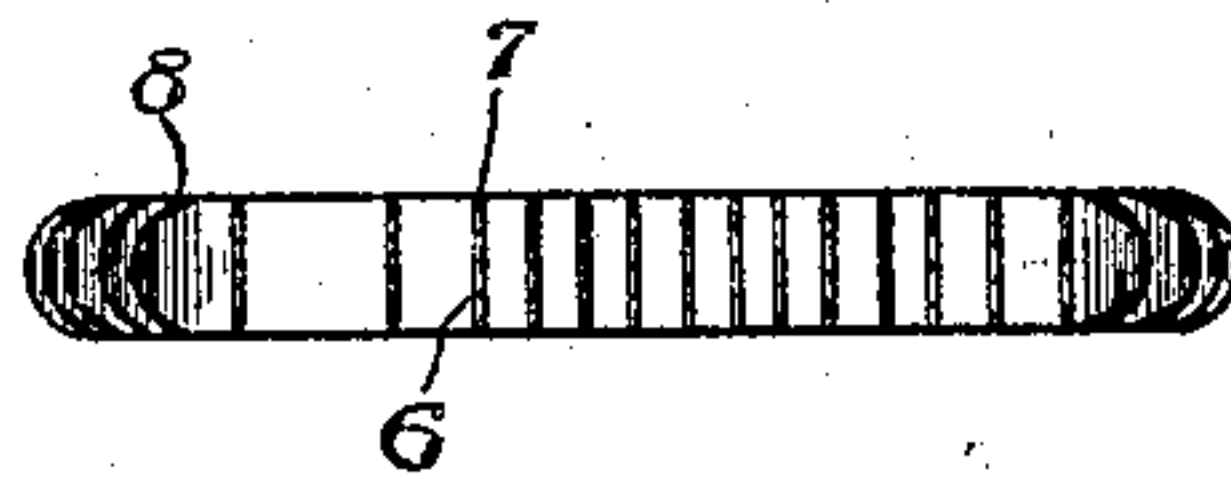


Fig. 3.



Fig. 4.



Witnesses
Raphael G. Blanc
H. C. Bowser.

Inventor
Henry A. Eichorn
By Henry J. Miller

UNITED STATES PATENT OFFICE.

HENRY A. EICHORN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HENRY J. MILLER, OF BOSTON, MASSACHUSETTS.

HEMSTITCHER-DISK.

No. 919,706.

Specification of Letters Patent.

Patented April 27, 1909.

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To all whom it may concern:

Be it known that I, HENRY A. EICHORN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Hemstitcher-Disks; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in comparatively small wheels having a series of inclined blades and known as hemstitcher disks as they are designed to be rotatably mounted in hemstitcher devices and have peripheral thread taking arms.

One object of this invention is to so construct a comparatively small wheel or disk having peripherally disposed inclined blades that the disk may be of durable construction.

Another object of the invention is to reduce the cost of construction.

Other objects of the invention will appear from the following description.

The invention consists in the peculiar construction of the disk hub and the novel manner of securing the blades therein.

The invention also consists in such other novel features of construction and combination of parts as shall hereinafter be more fully described and pointed out in the claims.

Figure 1, represents a plan view of the improved disk. Fig. 2, represents a sectional view thereof taken on line 2—2 Fig. 1. Fig. 3, represents an edge view of one of the blades removed from the disk. Fig. 4, represents a plan view of the same.

Similar numbers of reference designate corresponding parts throughout.

Disks of the general nature herein described are primarily designed for use in hemstitcher attachments for sewing machines and are of necessity of small sizes generally of a diameter less than one and one half inches. It is desirable that the hubs of these disks should have or be provided with a large number of outwardly extending blades which are designed to hold back thread between stitches, to permit of the spacing of the two pieces of fabric, whereby the hemstitching effect is produced. In order to facilitate the drawing off of the loops of thread formed on said blades, as the work is fed forward, said blades preferably extend at incli-

nations to the radii of the axis of the hub and are inclined to the surface plane of said hub. It is quite important that said blades should be accurately shaped, so that the thread loops may readily be released with the least possible frictional resistance, and said blades should be accurately spaced to receive the needle between them. As heretofore constructed the blades have been integral with the hub and have been formed by cutting out material to form spaces somewhat similar to the shape of the blades. By such method it has been practical to make but a single cut in a single disk at each relative movement of the cutting tool while it has been difficult to suitably shape the blades and, when completed, it has been impractical to repair one or more of the blades when injured by bending or twisting.

In carrying this invention into practice I construct a hub 5 of bronze or similar durable material and having a circular periphery and in the periphery of this hub I form, preferably by sawing, a series of straight slots 6—6 which are preferably parallel to the axis of the hub in their extension through the thickness of the hub or approximately at right angles to its surface and extend at inclinations to the radii of said hub. I then form a series of blades, Figs. 3 and 4, having the shanks 7 and the inclined blades 8 bent from said shanks. The shanks 7—7 are now inserted in the slots 6—6 of the hub 5 and are secured in place by punching the metal of the hub about the edges of said shanks or by soldering or similar well known means. By this construction I am able to greatly reduce the cost of manufacture as a large number of the hubs 5 may be strung on an arbor and slots 6—6 sawed through the entire number at a single movement of a saw with relation to said disks. As the blades can be cut and shaped at one operation from steel or other suitable metal having the grain extending in the most desirable direction these blades are durable and their surfaces are more suitable for the uses of the disk than if the blades were cut from an integral hub. When one of the blades becomes damaged it can be readily removed and a new blade inserted in its place.

These disks are primarily designed for use in hemstitching attachments for sewing machines in which devices disks of this nature are supported at an inclination with the goods under operation with the blades at one

portion of the wheel in contact with the goods under operation whereby the feeding forward of such goods preferably effects the rotation of the wheel. The blades are so inclined that the needle may pass therebetween in making a stitch so that as the wheel is progressively rotated the blades pass in succession between the needle and the work and each blade is designed to take up a loop between each pair of stitches and to subsequently cast off said loop to leave slack thread for the hemstitch effect.

The structure by which the wheel is supported forms no part of the present invention as any suitable structure may be used.

Having thus described my invention I claim as new and desire to secure by Letters Patent.

1. A hemstitcher disk comprising a hub having a series of slots extending inward from its periphery and a series of blades having shanks secured in said slots.

2. A hemstitcher disk comprising a hub having a series of slots inclined to the radii of said hub, and sheet metal blades having shanks secured in said slots.

3. A hemstitcher disk comprising a hub having means for receiving and holding a series of blade shanks, and a series of blades having shanks secured in said holding means, said blades being inclined to their said shanks.

HENRY A. EICHORN.

Witnesses:

H. J. MILLER,

M. M. HARRINGTON.