

(No Model.)

C. E. WILLIAMS.

DISK WHIP HEAD.

No. 361,035.

Patented Apr. 12, 1887.

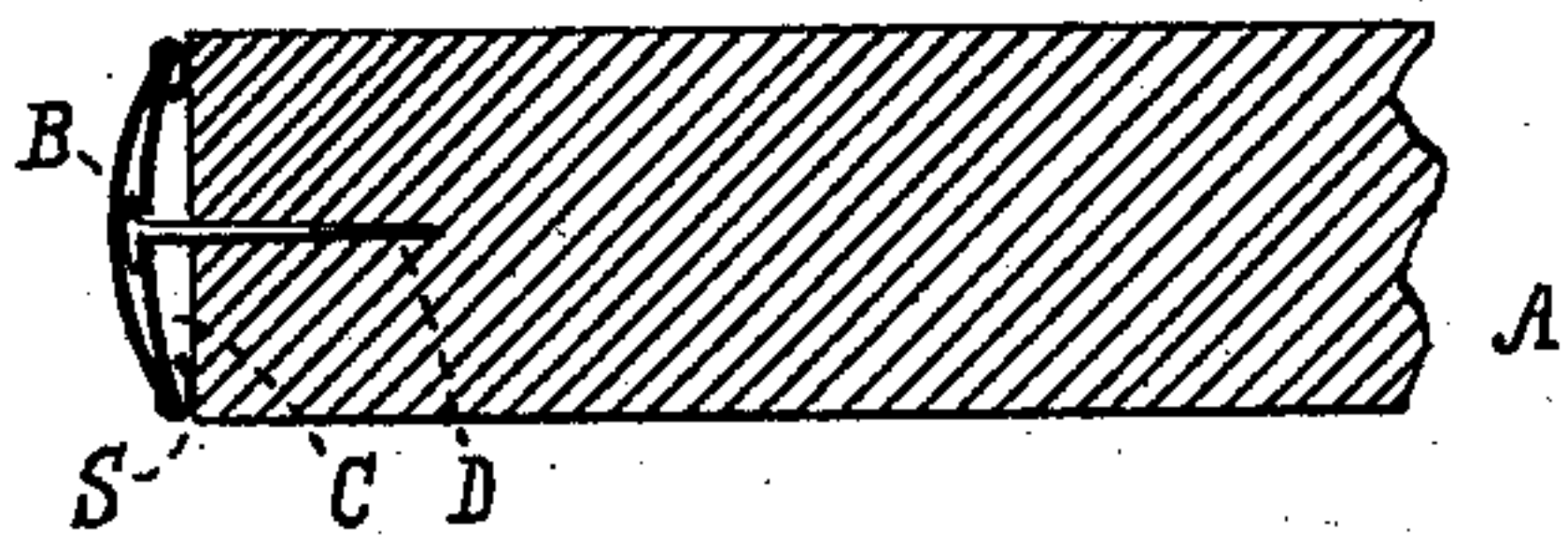


Fig. 1.

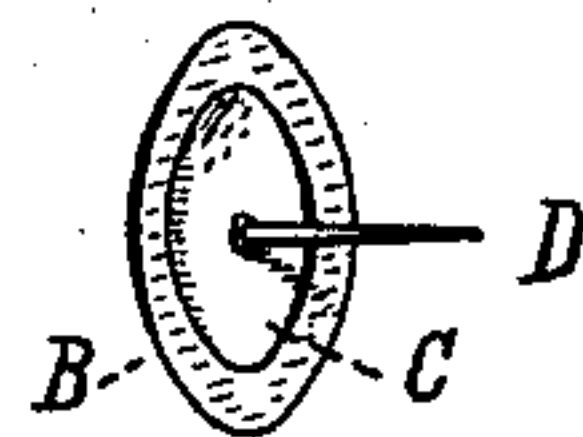


Fig. 2.

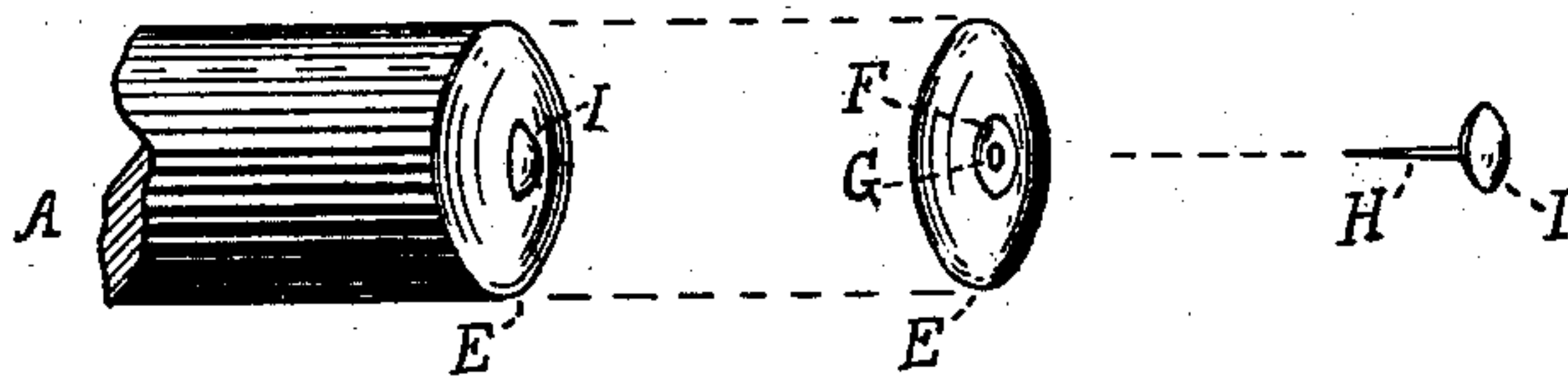


Fig. 3.

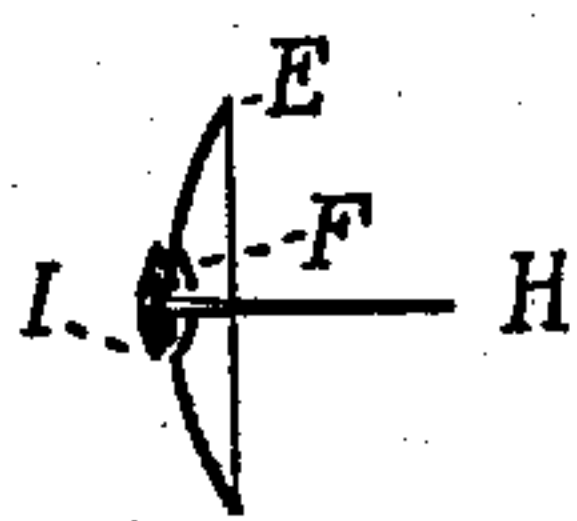


Fig. 4.

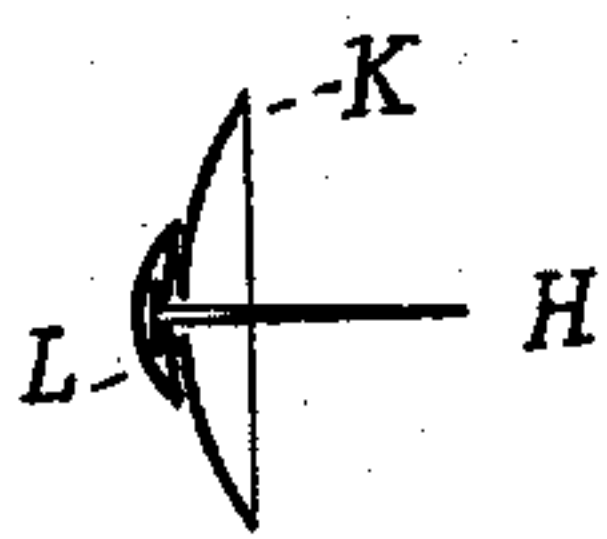


Fig. 5.

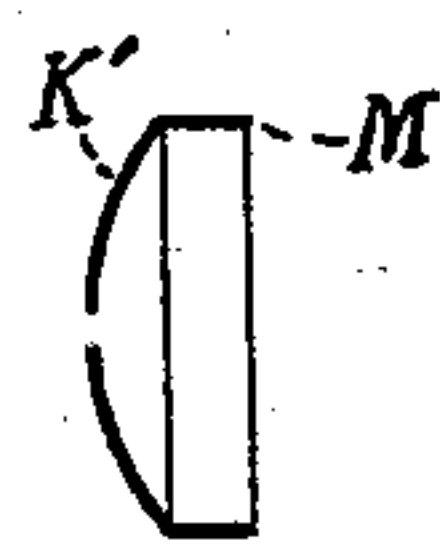


Fig. 6.

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UNITED STATES PATENT OFFICE.

CHARLES E. WILLIAMS, OF WESTFIELD, MASSACHUSETTS.

DISK WHIP-HEAD.

SPECIFICATION forming part of Letters Patent No. 361,035, dated April 12, 1887.

Application filed November 19, 1886. Serial No. 219,382. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. WILLIAMS, of Westfield, in the county of Hampden and Commonwealth of Massachusetts, have invented a new and useful Disk Whip-Head, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

As is well known to those skilled in the art to which my invention relates, whips have heretofore been finished at the butt by the application thereto of either a "cap," a "whip-head," or a "nail-head." The cap and whip-head are used upon the better grades of whips and constitute a considerable item in the cost thereof. For the cheaper grades of whips, however, some means for finishing the end of the butt must be used which is inexpensive in itself and which can be easily and economically fitted to the whip, and for them the nail-head has been employed. This nail-head consists of a long slender tack or nail having a head of the diameter of the end of the whip-butt, the particular construction of which is hereinafter more fully described.

The loose ends of the braided or woven covering of the whip extend slightly beyond the end of the latter, and are turned inward upon the end of the butt, after which the nail-head is driven into the butt until its head is flush therewith, thus securing the loose ends of the cover and finishing the end of the whip. As these heads are driven in by hand, it is found to be very difficult to start the point of the tack exactly in the center of the butt, while the slightest deviation therefrom causes the periphery of the head to project at some point beyond the periphery of the butt in a manner to seriously injure the appearance of the whip. Again, even if properly centered at starting, it requires the utmost care to strike the tack squarely in the center of the large head thereof in such manner as to drive it into the hard wood of which the butt is composed in a perfectly straight line, which must be done in order to secure the concentricity of the head and end of the butt. These objections and others which will be hereinafter noted have rendered it very desirable that a substitute for this style of head should be devised which, while retaining all of its advantages, shall be free from its defects.

To this end my invention consists in the disk whip-head constructed as hereinafter fully described, and particularly pointed out in the claims.

Referring to the drawings, in which like letters designate like parts throughout, Figure 1 is a longitudinal section of a portion of a whip-butt having applied thereto the nail-head heretofore in use. Fig. 2 is a perspective view of said nail-head. Fig. 3 is a diagrammatic perspective view of a portion of a whip-butt having my new disk whip-head applied thereto, and also showing the two members thereof separately. Fig. 4 is a vertical central section of the disk whip-head shown in Fig. 3. Figs. 5 and 6 are vertical sections of slightly-modified forms of my invention.

In Figs. 1 and 2, the letter A designates a portion of a whip-butt; B, the outer leaf; C, the inner leaf, and D the tack or nail of the nail-head as heretofore employed. This nail-head, which is the ordinary "trunk-nail," has an inner leaf of tin or sheet metal, through a central orifice in which the tack is inserted, and an outer leaf of greater diameter, the edge of which is bent inwardly around the periphery of the inner leaf and stamped down, thus forming a nail with a large head and having a bead extending around the periphery of its head, as clearly shown in Fig. 1. As hereinbefore stated, these nail-heads are applied to the whip-butt by manually driving the tack into the end thereof, as shown in Fig. 1, and, aside from the great difficulty in starting the tack exactly in the center of the butt and the equally difficult feat of driving the tack straight when properly centered, as previously mentioned, the peripheral bead just referred to forms a shoulder, as shown at S, which, in striking various objects in the ordinary use of a whip, loosens the tack in the wood and often results in the loss of the head. The said bead also has a tendency to permit the loose ends of the covering fabric to escape from beneath the head, thus imparting a ragged appearance to the whip. The outer surface of these heads is enameled or otherwise ornamented, and it is found that when placed in packages for sale the points of the tacks seriously injure the appearance of the heads by scratching or indenting this ornamented surface.

Turning now to Figs. 3 and 4, the letter E designates the disk, and H the independent tack, of my new whip-head, the former having the central perforation, G, and the latter the covered head I. This new head is applied to the whip-butt, as indicated by the dotted lines in Fig. 3, by placing the disk concentrically against the end of the butt and then inserting the tack in the central perforation, G, and driving it into the butt.

It will be observed that in this operation no time is lost by the endeavor to start the tack in the center of the butt, the perforation G insuring its being properly centered; that no difficulty is experienced in driving the tack straight, owing to its small head, and that the concentricity of the head with the end of the butt is assured in every instance.

The disk is preferably concavo-convex, as shown, thus leaving ample space for the loose ends of the whip-covering, while at the same time making a tight joint with the butt at the periphery thereof, to prevent the said ends from working out from beneath the head. Such form, moreover, secures the head from liability of becoming detached in the use of the whip. The disk will also be provided in the preferred form with a countersunk depression, F, in its convex side to receive the head of the tack, which latter will preferably be made oval in cross-section, as shown in Figs. 3 and 4, such construction resulting in a neat and compact finish for the end of the whip.

In Fig. 5 I have shown a disk, K, having the perforation only, the depression being omitted and the tack having a concavo-convex head, L; but as in this construction the tack is more liable to become loosened in use, I prefer the form first described, as stated.

In Fig. 6 I have shown a disk, K', made according to my invention and having a flange, M, to project over the end of the whip, and it will be apparent that the tack shown in Fig. 5 could be used equally well with this form of disk, if desired.

By making the disk and tack independent of each other, I am enabled to utilize any of

the well-known nail-driving machines for securing the head to the whip, and as the two parts may be put up in separate packages for sale, the enamel or other finish of the disks is not scratched or indented by the points of the tacks. Moreover, by making the disks and tack-heads of contrasting materials or ornamentation, I enable the whip-maker to arrange different combinations of the two, and thus vary the style of head at will.

As the disks can be stamped from sheet metal at a very small cost, and as they can be rapidly applied to whips with perfect accuracy, it will be seen that I thus provide a head which can be economically used upon the cheapest grade of whip, and yet which will finish and ornament such whip in a manner hitherto impracticable.

It is obvious that modifications other than those illustrated in the contour of the disk or the tack-head, or in the substitution of a small screw for the tack, could be made, without departing from the spirit of my invention.

I claim—

1. A whip-head consisting of a concavo-convex disk having a central perforation and a countersunk depression in its convex side, and an independent tack or similar device having a head oval in cross-section, adapted to occupy said depression when the tack is inserted through the perforation to secure the disk to a whip-butt, substantially as described.

2. The combination, with a whip-butt, of a concavo-convex disk the diameter of which is that of the end of the butt, said disk having a central perforation and a countersunk depression in its convex side, and a tack inserted through said perforation into the butt, said tack having a head oval in cross-section occupying said depression, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

CHARLES E. WILLIAMS.

Witnesses:

W. H. CHAPMAN,
H. K. HAWES.