

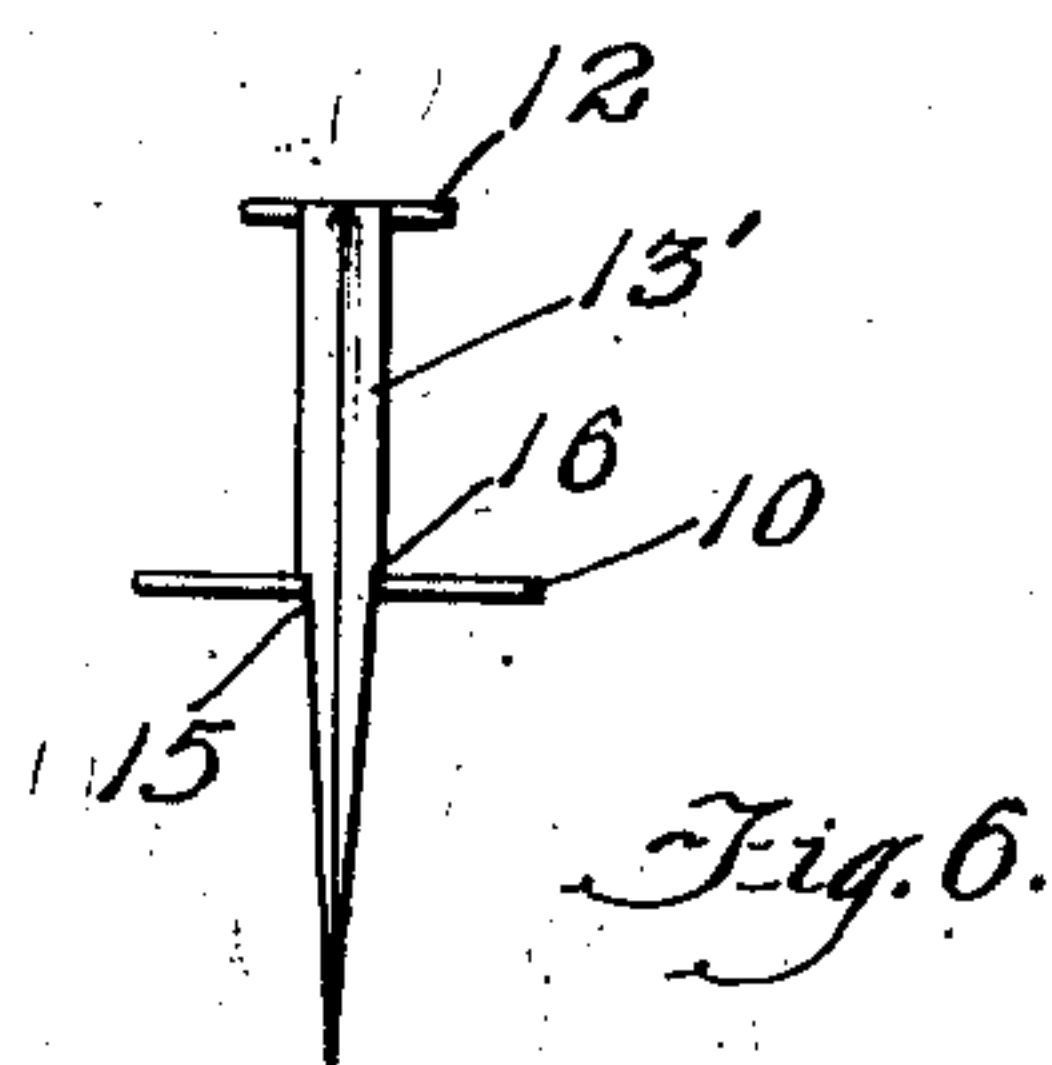
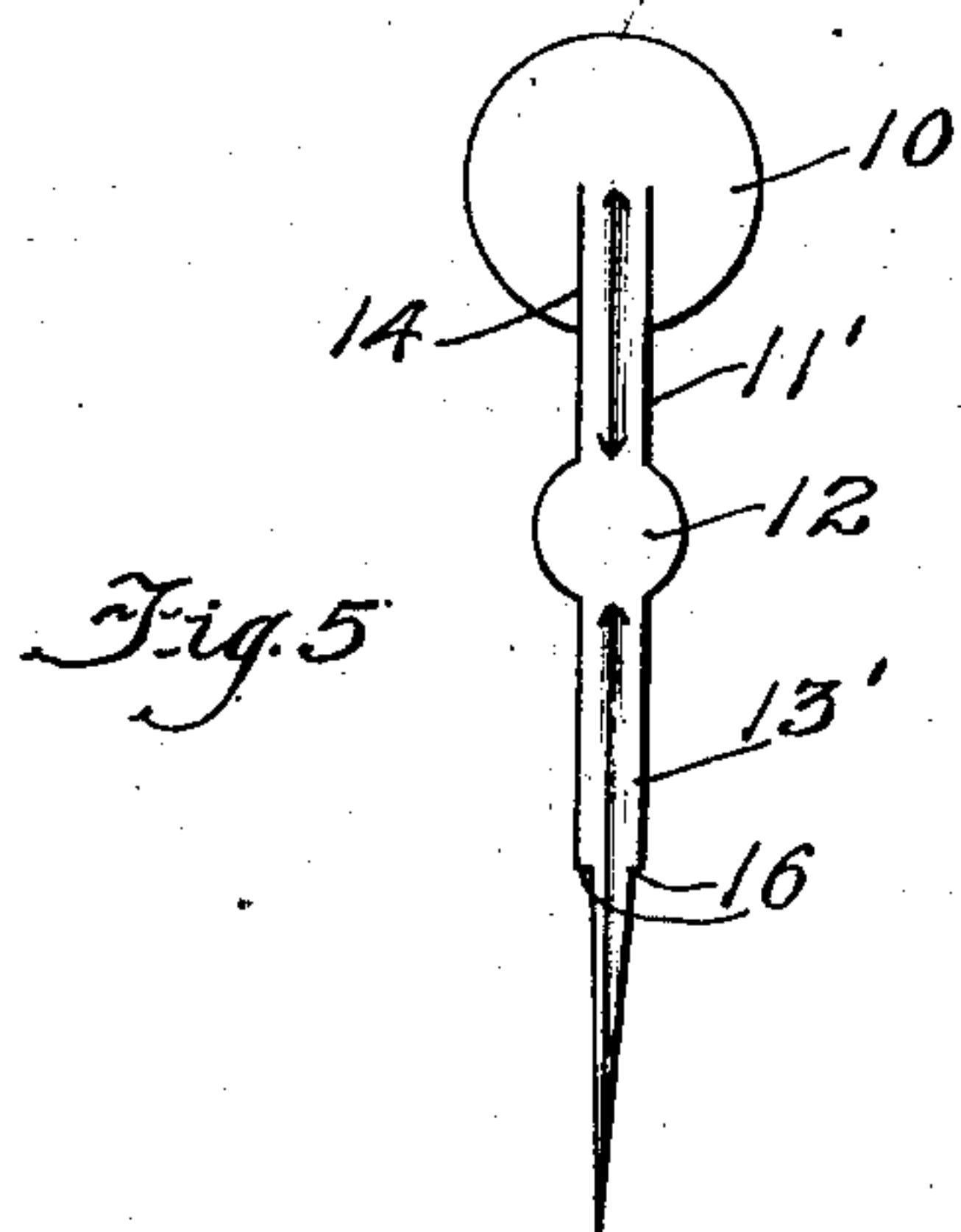
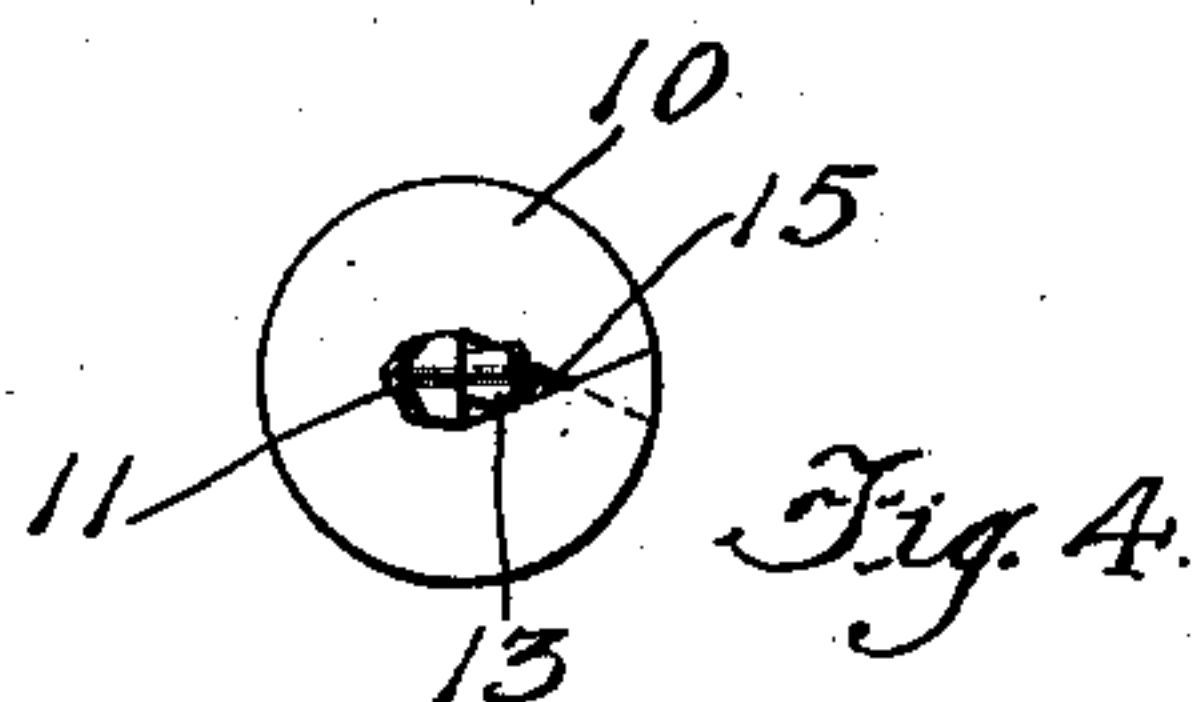
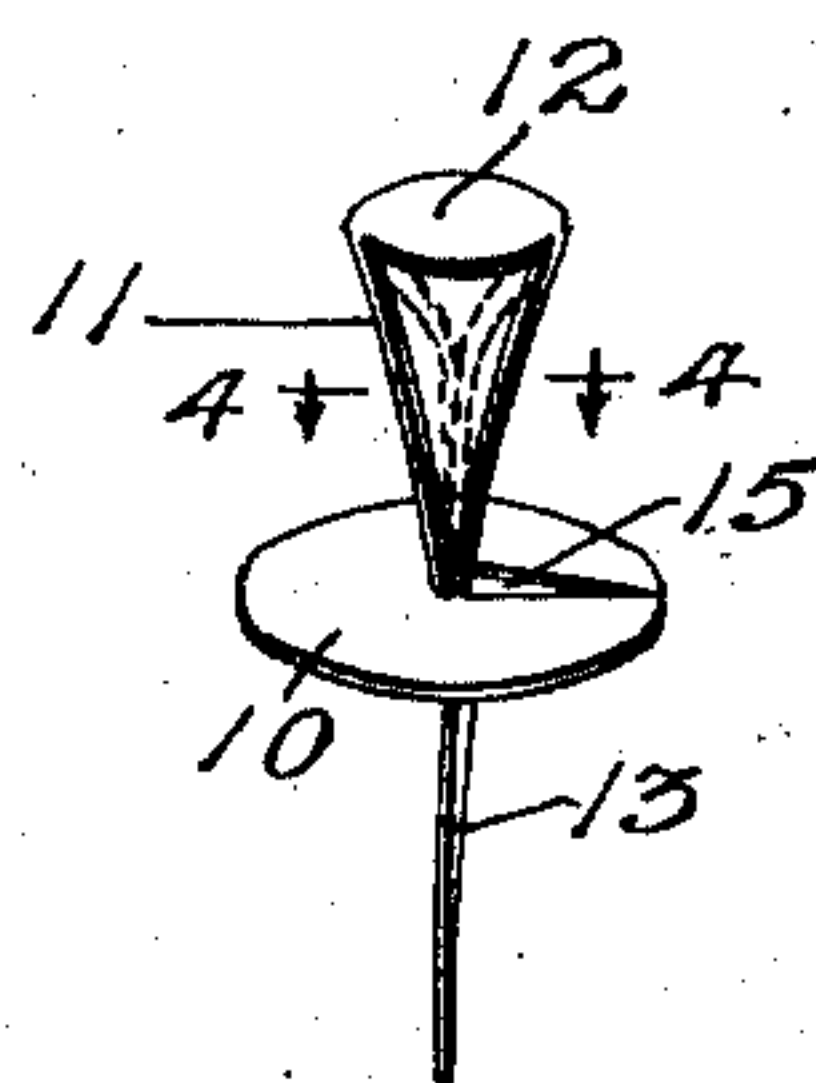
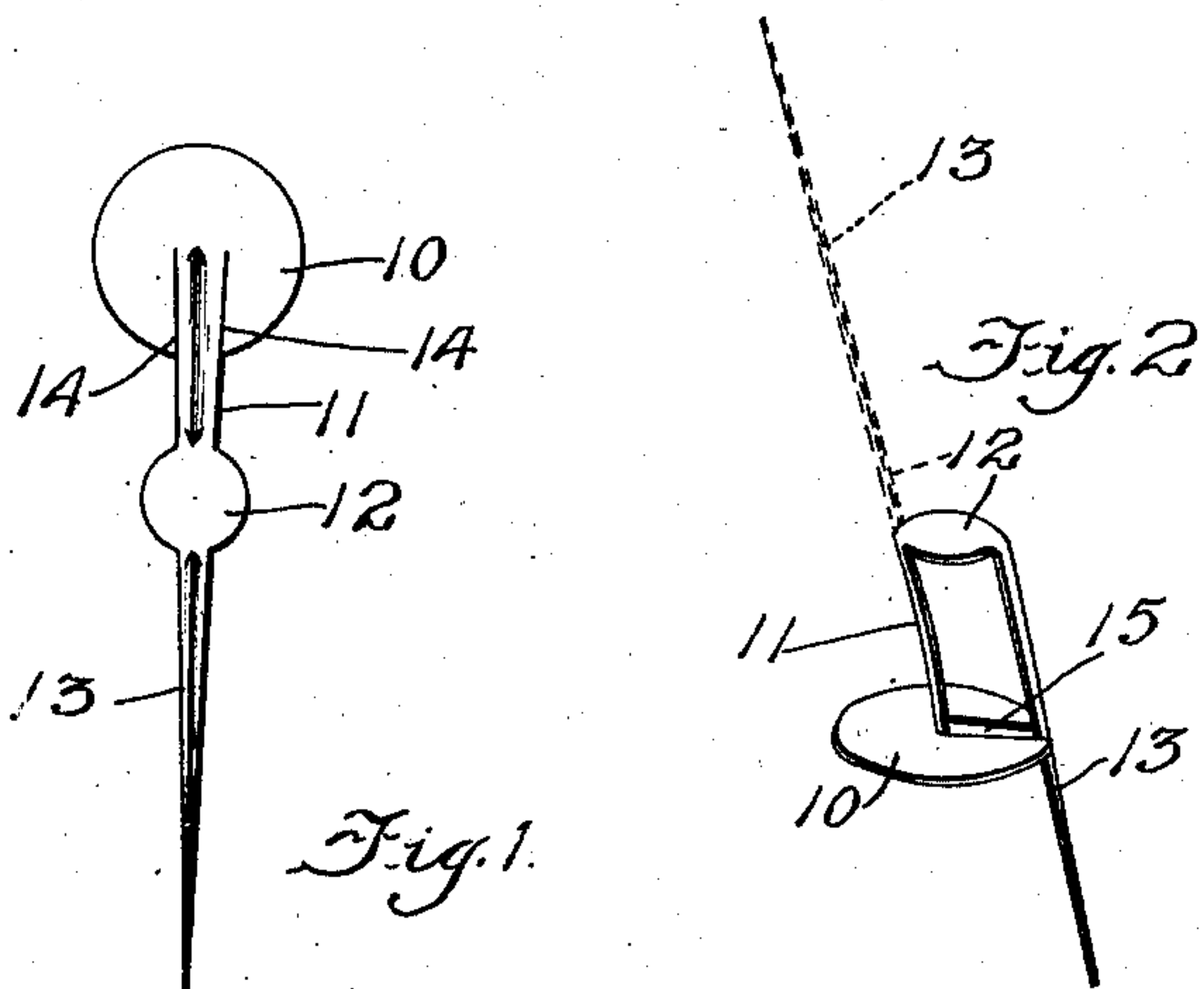
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PUSH PIN

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UNITED STATES PATENT OFFICE

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PUSH-PIN

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The principal object of the present invention is to provide an improved push-pin.

Another object of the present invention is the provision of a push-pin which may be formed by stamping a blank and thereupon suitably bending the same to form a push-pin.

A still further object of the present invention is the provision of a push-pin which may be formed out of a stamped blank and which may have a disk, driving end and a head.

A still further object of the present invention is the provision of a method for making a push-pin by suitably forming a blank stamped out of a sheet of metal.

With the above general objects in view and others that will appear as the nature of the invention is better understood the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawing and pointed out in the appended claims.

In the drawing forming a part of this application, and in which like designating characters refer to corresponding parts throughout the several views,

Fig. 1 is an elevational view of a stamped blank out of a sheet of metal preparatory to its being formed into a push-pin;

Fig. 2 illustrates one of the steps in making a push-pin of the stamped blank;

Fig. 3 is a perspective view of a completed push-pin;

Fig. 4 is a cross-sectional view through the push-pin or horizontal plane on line 4—4 of Fig. 3;

Fig. 5 is a blank for a modified form of the push-pin; and

Fig. 6 is a side elevational view of the modified form of the push-pin.

Referring to the present drawing there is shown on Fig. 1 a blank stamped out of a sheet of metal, including disk 10, from which stem 11 radially projects. Said blank further includes a flat head 12 which is made at the

outer end of said stem 11. Projecting from said head 12 at a point which is diametrically opposite from the point where said stem 11 joins said head 12, is a tapering prong 13, said prong 13 being substantially twice as long as said stem 11. Said stem 11 begins at the center of said disk 10 and is integrally formed therewith, its inner end being separated from said disk 10 by incisions 14 on lines which are continuations of the edge lines at the free body portion of said stem 11.

Longitudinally and centrally said stem 11 and prong 13 are angularly bent, so that in cross-section on transverse plane thereof the same will have a V-shaped formation as seen on Fig. 4. This is for the purpose of strengthening the push-pin, imparting a body thereto and giving it a rounded appearance.

When the blank shown on Fig. 1 has been completed in accordance with the aforesaid description, said stem 11, head 12 and prong 13 are raised until the same assume position substantially at a right angle to the body of disk 10, as indicated by dotted lines on Fig. 2. Said stem 11, head 12 and prong 13 may be bent slightly further so as to impart to said stem 11 slightly curved or flaring out position. When said stem 11, head 12 and prong 13 will be brought to the position indicated by dotted line on Fig. 2 or in other words when the same will remain at substantially a right angle to the plane of the disk 10, there will result a recess or slot 15 in disk 10, bordered by edges made by the incision lines 14.

Thereupon head 12 and prong 13 are bent at point of juncture of stem 11 with head 12, until said head assumes a substantially right-angled relation with respect of stem 11, or until said head 12 shall remain substantially in parallel relation with disk 10.

Thereupon prong 13 is bent downwardly, at a point of juncture thereof with said head 12, as seen on Fig. 2, and thereupon said prong 13 is brought within slot 15 and close

to the lower or inner end of said stem 11, the position illustrated in Fig. 3. Said prong while in that latter position may be slightly curved oppositely to the curvature of said stem 11 so that the push-pin may present a neat and symmetrical appearance as clearly seen on Fig. 3.

When said prong 13 is in its operative position shown on Fig. 3, thereupon pressure is exerted at the periphery of disk 10 adjacent the outer termination of slot 15 for bringing the two points resulting from said slot 15 and the periphery edge in contact, as seen on Fig. 3, by virtue of which operation slot 15 will assume a triangular formation. By this means disk 10 will assume a neat and uniform appearance and its periphery will become smooth, and at the same time prong 13 will be clinched within said slot 15 and will be held in position within disk 10.

The modified form of the invention illustrated on Figs. 5 and 6 includes the identical disk 10 and head 12, but stem 11' is not tapered, but is of rectangular formation. Also prong 13' has a perpendicular form. The outer end of prong 13' is reduced and downwardly tapered, affecting shoulders 16, which, when the blank is formed into a push-pin will be adapted to rest upon the edges of disk 10 adjacent slot 15, as clearly seen on Fig. 6. In the modified form of the invention stem 11' and prong 13' are also longitudinally and centrally bent or ribbed for strengthening the same.

The advantage in providing shoulder 16 in the modified form of the invention resides in the fact that should the push-pin be driven into the wall by employment of a hammer, applying the strokes thereof at head 12, said shoulders 16 bearing against the flange 10 will hold prong 13' in position and will prevent said prong 13' to make any shifting movement with respect to disk 10.

It is to be understood that the push-pin hereinabove described when driven into a wall should be driven until disk 10 will remain in contact with the wall. Thus head 12, stem 11 and portion of prong 13 or 13' adjacent head 12 will provide means for hanging thereupon the desired object.

Said stem 11 as well as portion of prong 13 remaining above disk 10 may be bent towards each other to the position indicated by dotted lines on Fig. 3, which operation will more clearly define head 12 and at the same time will prevent said stem 11 and portion of said prong 13 aforesaid from bending outwardly when pressure is applied at head 12 for driving the push-pin into the wall.

While there is described herein a preferred embodiment of the present invention it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What I claim as new is:

1. A push pin comprising a disk, a stem integrally formed with the central portion of said disk, a head integrally formed with said stem and being in an angular position with respect to said stem, and a prong integrally formed with said head and angularly disposed with respect thereto, said disk having a radial slot through which the opposite free end of said prong is adapted to project.

2. A push-pin comprising a disk, a head, said disk and said head being substantially in parallel relation, a stem integrally formed with and connecting with said disk and said head, and a prong integrally formed with said head, said disk having a radial slot within which said prong is positioned, the other free end of said prong extending beyond the other side of said disk.

3. A push-pin comprising a disk, a head, said disk being in substantially parallel relative position to said head, a stem integrally formed with said disk and projecting therefrom from its central portion, the other end of said stem integrally connecting with the edge of said head, and a prong integrally formed with said head and projecting from the edge thereof, said prong passing through a recess made in said disk.

4. A push-pin comprising a disk, a head, a stem connecting with said head and said disk, and a prong, said disk having a slot which accommodates said prong therewithin, said prong being reduced in width to form shoulders, said shoulders being adapted to rest upon the edges in said disk adjacent said slot.

5. A method of making a push-pin, comprising stamping a blank out of a sheet of metal, said blank including a disk, a stem, a head, and a prong, making incisions in said disk along the lines which are continuations of the edges of said stem, said incisions reaching substantially to the central portion of said disk, bending said stem at the point at which the same joins with said disk until the same shall be at substantially right angle with respect to the disk, thereupon bending said head until the same remains in parallel relation with said disk, and thereupon bending said prong perpendicularly to said disk and passing the same through the slot resulting from said incisions.

6. A push-pin comprising a disk, a head, said disk being in substantially parallel relative position to said head, a stem integrally formed with said disk and projecting substantially from the central portion thereof, the other end of said stem integrally connecting with the edge of said head, and a prong integrally formed with said head and projecting from a diametrically opposite point at the edge thereof, said disk being provided with a radial slot, said prong passing through said slot.

7. A push-pin comprising a disk, a head,

said disk being in substantially parallel relative position to said head, a stem integrally formed with said disk and projecting substantially from the central portion thereof, the
5 other end of said stem integrally connecting with the edge of said head, and a prong integrally formed with said head and projecting from a diametrically opposite point at the edge thereof, said disk being provided with
10 a radial slot extending from the termination of said stem to the edge of said disk, said prong passing through said slot and adjacent the lower end of said stem.

In testimony whereof I affix my signature.

ANTON PAVELKA.

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