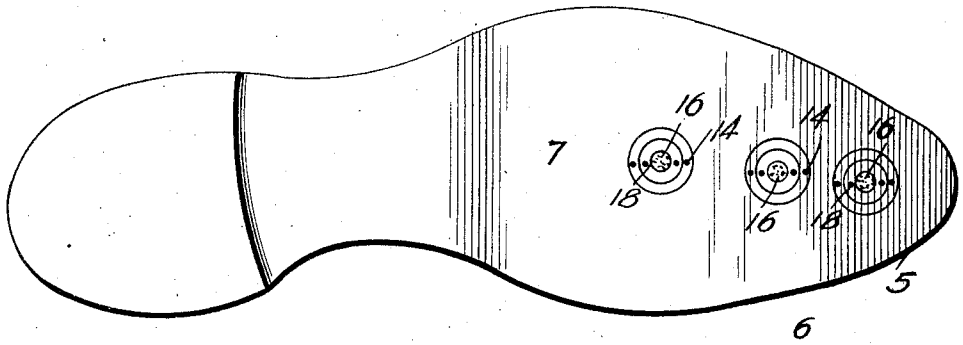
Jan. 3, 1928. 1,655,326

J. F. MONTINE

SHOE

Filed March 20 1926 2 Sheets-Sheet 1

FIG. 1.



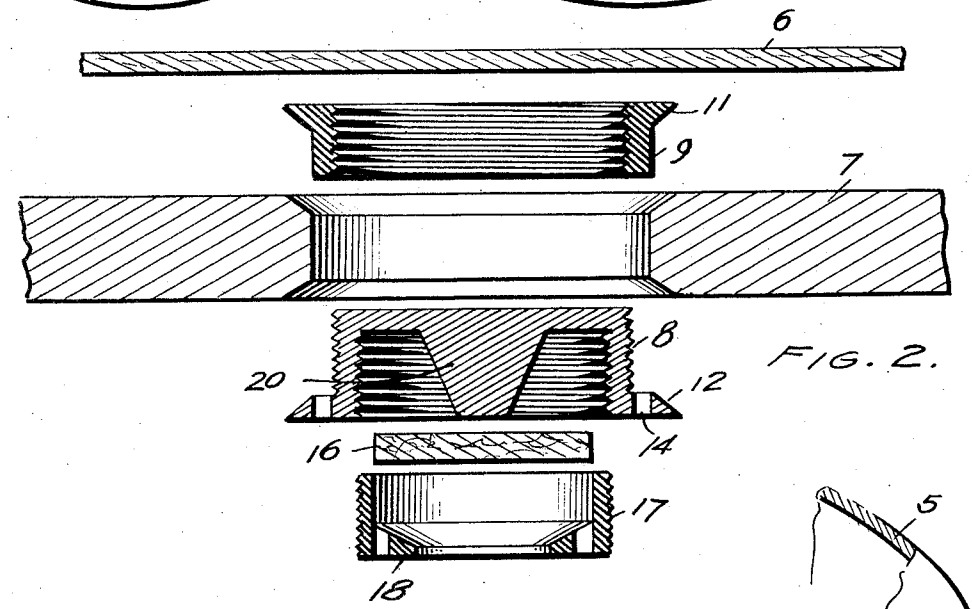


FIG. 2.

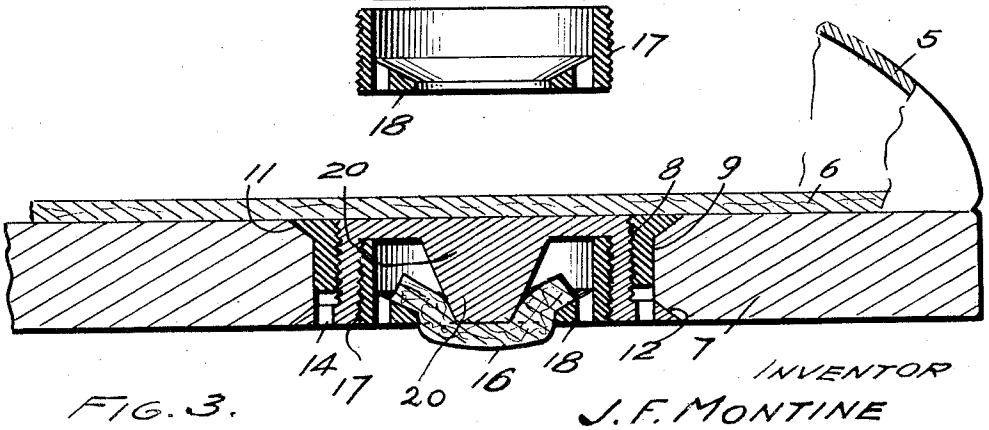


FIG. 3.

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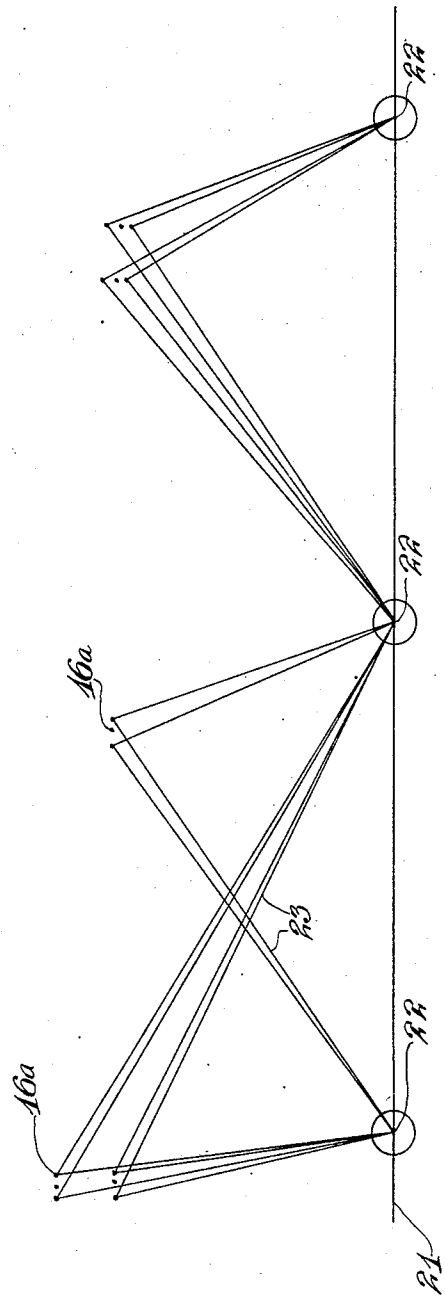


Fig. 4.

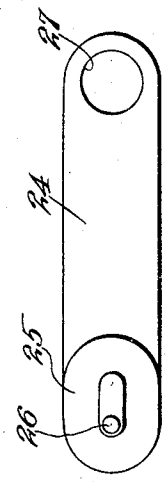


Fig. 6.

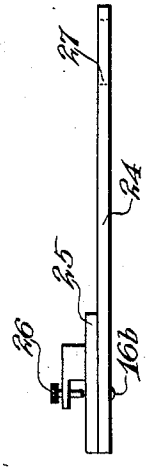


Fig. 5.

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UNITED STATES PATENT OFFICE.

JOSEPH F. MONTINE, OF CHICAGO, ILLINOIS.

SHOE.

Application filed March 20, 1926. Serial No. 96,250.

This invention relates to shoes especially adapted for use by dancing instructors in marking or charting a floor to aid or guide the dancing student in taking the proper steps.

The invention forming the subject matter of this application is in the nature of a shoe having a plurality of separate spaced floor marking devices, which when brought in contact with a dancing floor will leave marks of one or more colors thereon which when mounted with suitable indicating symbols will not only guide the student in taking the proper steps, but which will also indicate the proper foot to be placed upon the various marks and will indicate the length of each step.

A further and equally important object of the invention is to provide a floor marking device in which the marks formed by the same may be of different colors or outlines to distinguish the lady's steps from the gentleman's steps.

A further object is to provide a marking device which may be attached to a lady's or gentleman's dancing slipper or shoe either during the manufacture of the same or at any time thereafter and which will not interfere with the bending of the shoe within reasonable limits and which will not be a source of discomfort to the wearer.

A further object is to provide a marking or charting means for shoes in which the marking element may be easily removed either for the renewal of the marking element or for the use of the shoe without marking the floor.

Other objects and advantages will be apparent during the course of the following description.

In the accompanying drawing forming a part of this application and in which like numerals are employed to designate like parts throughout the same,

Figure 1 is a bottom plan view of a shoe equipped with the improved marking or charting means;

Figure 2 is a group view of one of the marking members, the parts thereof being shown in section;

Figure 3 is a detail longitudinal sectional view through a shoe equipped with the improved floor marking means;

Figure 4 is a diagrammatic view of a specimen dance in which the principle of the invention is employed;

Figure 5 is an elevation of a marking device for the plotting of a specimen dance; and

Figure 6 is a plan view of said marking device.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of the invention, the numeral 5 designates the upper of a lady's or gentleman's dancing shoe or slipper, which slipper is provided with the usual insole 6 and an outer sole 7.

The shoe may be provided with a plurality of separate spaced floor marking members consisting of inner and outer ring nuts or attaching members 8 and 9, respectively, the ring nut 8 being externally threaded for engagement with the internal threads of the ring nut 9. Preparatory to applying the ring nuts 8 and 9 the inner sole 6 is removed from the shoe and a hole is punched or otherwise formed in the outer sole 7 for the reception of the members 8 and 9. The ring nut 9 is now passed through the hole in the shoe from the interior of the shoe and the annular flange 11 at the rear end of the member 9 is engaged with the edge portion of the outer sole 7. After this the inner ring nut 8 is threaded into the outer ring nut 9 so that the external annular flange 12 at the rear end of the same will be engaged with the outer portion of the outer sole 7. Thus it is that the inner and outer ring nuts 8 and 9 may be securely and positively attached to the outer sole. The annular flange 12 may be provided with spaced openings 14 for the reception of a suitable tool by means of which the ring nut 8 may be securely tightened in the ring nut 9. It will be seen that the thickness of the assembled ring nuts 8 and 9 will be no greater than the thickness of the outer sole and in fact by turning the inner ring nut 8 a sufficient distance into the outer ring nut 9 the thickness of the assembled members 8 and 9 may be slightly less than the thickness of the outer sole 7 so that the outer end of the inner ring nut will be spaced a slight distance from the floor. This, however, is not necessary.

The member 8 has its inner end closed to define a socket for the reception of an absorbent member 16 of felt or the like which is firmly held in place by a retaining nut 17 having an internal annular flange 18 which engages the edge portion of the absorbent

member 16 and thereby holds the absorbent member in engagement with the centrally located stud 20 of the member 8. This stud 20 is in the form of a truncated cone and presses the central portion of the absorbent member 16 outwardly into contact with the floor so that the ink or the like in the member 16 will leave a mark on the floor for purposes of recording the step. Attention is directed to the fact that the inner surface of the flange 18 is beveled so that the edge portion of the felt member 16 will not be cut or subjected to excessive pressure when the retaining member is threaded into the socket of the ring nut 8.

Any number of the marking devices may be attached to the shoe along the longitudinal center of the same as shown in Figure 1 or in any other manner found practical and desirable. However, the arrangement shown in Figure 1 makes it possible for the shoe to be easily bent and does not in any way interfere with the freedom of dancing or cause discomfort to the wearer of the shoe.

As previously stated, the disk 16 may be removed to avoid marking the floor at improper times. The improved marking device may be applied to soles of various thicknesses by varying the thickness of the members 8 and 9.

In use several different colored ink pads are employed in charting a floor to indicate the different feet and the direction of travel, especially so when a couple chart a dance together. In this connection, it is pointed out that a particular color or combination of colors may be employed for the lady's shoe and another color or combination of colors may be employed for the gentleman's shoe. Also, one or more colors may be employed for the right foot, while one or more other colors may be employed for the left foot. Supplemented by the indicating symbols first referred to, this provides a practical and comparatively simple means for indicating to the dancing student the proper steps to be taken in a particular dance.

By way of example it might be pointed out that the two foremost inserts of the gentleman's right shoe and the foremost insert of the left shoe may bear red ink, while the others may be blue. The reverse of these colors may be employed for the lady's slipper.

This practice will enable one to distinguish between the locating marks of the different feet when a couple start a dance together. The gentleman's locating marks are, of course, spaced farther apart than the lady's. More specifically, the two foremost locating marks of a particular shoe are placed close together thereby leaving the third marking element of a particular shoe somewhat alone.

It will be seen that red will indicate the tips of the gentleman's shoes and the blue the tips of the lady's slippers. Two red and two blue tips will indicate the right foot, while one red and one blue will indicate the left foot of a particular dancer.

However, the invention is not in any way restricted to the use of the foregoing colors or arrangement or other mode of operation and it is to be understood that the form of invention herewith shown and described is to be taken merely as a preferred example of the same and that such minor changes in arrangement and construction of parts may be made as will remain within the spirit of the invention and the scope of what is claimed.

Figure 4 is a diagrammatic view of a specimen dance executed by the novel marking shoe. Each series of dots 16^a represents a dancer's shoe tip, and the arrangement of lines indicates a method of recording the position of each step. Thus, a base line 21 is drawn alongside the course of the dance, and three arbitrary points 22 stepped off thereon. Lines 23 are now drawn from the outer dots 16^a of each series to any of the points 22. If the distances between the latter are now recorded, and the dimensions of the lines 23 taken, it will be seen that the dance impressions 16^a can be re-plotted or charted at any time reference thereto as desired.

Figure 5 is an elevation and Figure 6 a plan view of a device I prefer to use for re-plotting or re-charting the dance just outlined. The device comprises a leather strap 24, a metal backing 25 for the latter, and a set screw 26 carried by the backing. Below the screw 26, the strap is equipped with a protruding ink-pad 16^b, installed in the same manner as the pad 16 described above in connection with the shoe; and the opposite end of the strap is perforated at 27 for easy handling. To use the device for recharting once the base line 21 and the points of origin 22 have been laid out, a pair of steel measuring tapes, are preferably used. These are usually housed in a circular casing and carry a ring at the free end or measuring origin. Thus, if the position of a given point is to be recharted, two measuring tapes are linked with their rings upon the set screw 26 of the device 24, the given measurements to the points 22 taken and held at these points and the tapes drawn taut by the person holding the marker 24. The latter is now depressed to imprint the desired floor mark with the ink pad.

Having thus described the invention, what is claimed is:

1. A marking device for use on shoes comprising a pair of attaching members, one of which is provided with a socket, and a marking element received in said socket and adapted for engagement with a floor to mark the same.

2. A marking device for use on shoes com-

prising a pair of attaching members, one of which is provided with a socket, and a marking element received in said socket and adapted for engagement with a floor to mark the same, said attaching members being provided with annular flanges adapted to engage opposite sides of a shoe sole.

3. A marking device for use on shoes comprising inner and outer attaching members adapted to be extended through a shoe sole and having annular flanges adapted for engaging the opposite sides of a shoe sole, one of said attaching members being provided with a socket, and a retaining member extended into said socket and having means holding a marking element in place.

4. A floor marking device for use on shoes comprising inner and outer threadedly connected attaching members having means whereby the same may be securely attached to a shoe sole, said inner member being provided with a socket, the wall of which is threaded, a floor marking element received in said socket, a ring nut threaded into said socket and having an annular flange to hold said floor marking element in place.

5. A floor marking device for use on shoes comprising inner and outer threadedly connected attaching members having means whereby the same may be securely attached to a shoe sole, said inner member being provided with a socket, the wall of which is threaded, a floor marking element received in said socket, a ring nut threaded into said socket and having an annular flange to hold said floor marking element in place, said socketed member being provided with a central lug adapted to engage said marking element to force the same outwardly into contact with a floor.

6. The combination with a shoe having an outer sole and insole, of a plurality of marking elements carried by the outer sole, the inner sole being extended over said marking elements.

7. The combination with a shoe having an insole and an outer sole, of a plurality of marking members having means engaged with opposite sides of said outer sole and being approximately flush with the same at opposite sides thereof and having marking units adapted to be engaged with the floor.

In testimony whereof I affix my signature.

JOSEPH F. MONTINE.