F. SHIRLEY.

TOE SPREADER.

APPLICATION FILED NOV. 27, 1917.

1,305,749. Patented June 3, 1919.

Fig. 1.

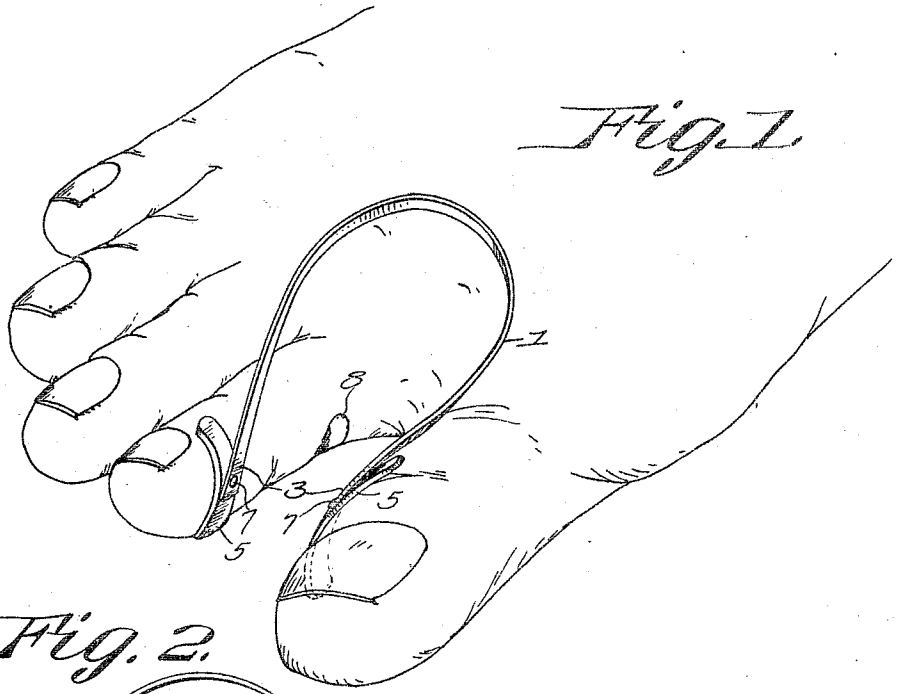
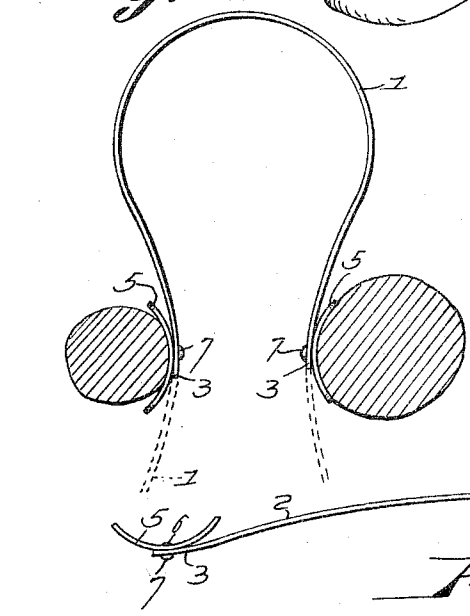


Fig. 2.



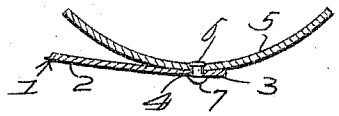


Fig. 3.

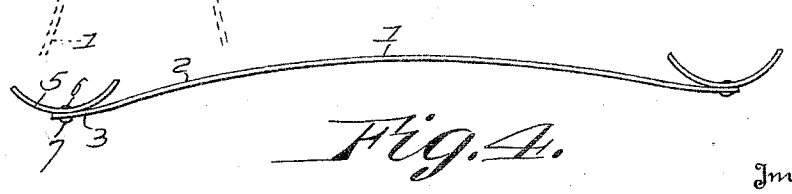


Fig. 4.

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TOE-SPREADER.

1,305,749. Specification of Letters Patent. Patented June 3, 1919.

Application filed November 27, 1917. Serial No. 204,162.

To all whom it may concern:

Be it known that I, FRANK SHIRLEY, a citizen of the United States, residing at Phoenix, in the county of Maricopa and State of Arizona, have invented certain new and useful Improvements in Toe-Spreaders, of which the following is a specification.

The present invention comprehends generally improvements in chiropodists' appliances and more particularly has reference to a toe spreader.

It is the primary aim and object of this invention to provide a device of the above mentioned character designed to be applied between the toes of a person to hold the toes in suitable spaced relation to enable the person or chiropodist to readily treat corns, calli, and other skin excrescences formed on the sides of the toes.

As an equally important object the invention contemplates the provision of a toe spreader wherein the construction is novel while the spreading element is resilient and assures of the retention of the device in position.

More particularly, this invention embraces the provision of a toe spreader wherein improved means are employed for connecting the toe engaging elements to the spreading element to permit the toe engaging elements to readily adjust themselves against adjacent toes and at the same time this improved means permits of the arrangement of the spreading element at various angles or positions with respect to the foot to consequently enable the chiropodist to employ both hands when treating the foot.

Among the other aims and objects of this invention may be recited the provision of a device of the character described with a view to compactness, and in which the number of parts are few, the construction simple and the cost of production low and the efficiency high.

Other improvements and novel details in the construction and arrangement of the various parts of the apparatus will be brought out more in detail in the description to follow, which, for a clear understanding of the invention, should be considered in connection with the accompanying drawings, forming a part hereof, and wherein is disclosed, for the purpose of illustration, a convenient and satisfactory embodiment of the invention. It is to be noted, in this connection, that minor changes in the construction and arrangement of the parts may be made without departing from the spirit of the invention or the principle of operation of the various parts.

The invention, in its preferred form, is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view of the device applied between adjacent toes of a foot;

Fig. 2 is a front elevation of the invention applied between adjacent toes, in section, the dotted lines indicating one of the directions or positions in which the device may be swung;

Fig. 3 is a fragmentary longitudinal sectional detail; and

Fig. 4 is a front elevational detail.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now more particularly to the accompanying drawings, there is provided a spreading element 1 which may be and preferably is formed from a single strip of relatively narrow resilient metal, the element being slightly bowed longitudinally throughout the greater portion of its length as at 2 while the respective end portions 3 thereof are relatively flat and formed with openings 4. Arcuate toe engaging elements 5 having rounded end edges are now employed and are desirably formed of the same kind of material used in making the spreading element 1. These elements 5 act as clamps and are provided midway their lengths with openings 6. Rivets 7 or like fasteners are now passed through the openings 6 and 4 for swiveling or swingingly connecting the toe engaging elements or clamps 5 to the end portions 3 of the spreading element 1.

In use, the spreading element 1 is held in one hand and bent into a substantially U-shaped form while the opposed toe engaging elements or clamps 5 are positioned against the inner sides of opposed toes as indicated in Fig. 1. The device is now released so that the tension of the spreading element 1 will act to spread the toes and enable either the user or chiropodist to employ both hands when treating a corn 8 or other skin excrescence formed on either or both of the adjacent toes. Owing to the provision of the rivets or fasteners 7, the spreading element may be swung to assume different positions

with respect to the foot so as not to interfere with the treating of the corn.

It is believed in view of the foregoing description that a further detailed description is entirely unnecessary and likewise it is believed that the advantages of the invention will be readily apparent. However, it may be mentioned that the device may be also used by manicurists for holding the fingers in spreading relation, if desired.

As many changes could be made in the above construction and many apparently widely different embodiments of this invention could be made without departing from the scope thereof it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative, and not in a limited sense, it is also to be understood that the language used in the following claim is intended to cover all the generic and specific features of the invention herein described and all statements of the scope of the invention, which as a matter of language might be said to fall therebetween.

Having thus fully described this invention what is claimed and desired to be secured by Letters Patent is:—

A toe spreader of the character described comprising a pair of toe engaging clamps each of which is formed from a single strip of relatively narrow resilient metal bent into an arcuate form, a spreading element also formed from a single elongated strip of relatively narrow resilient metal slightly bowed longitudinally and having relatively flat end portions, fasteners passing through the medial portions of the clamps and the end portions of the element for swingingly connecting the clamps to the outer surfaces of the end portions of the element so that the element when bowed upon itself will exert a tension on the clamps to hold them in position, and the fasteners also permitting of the swinging of the element in various directions when the clamps are held in position by the element.

In testimony whereof I affix my signature.

FRANK SHIRLEY.

Witnesses:
HAZE BURCH,
A. M. DALY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."