

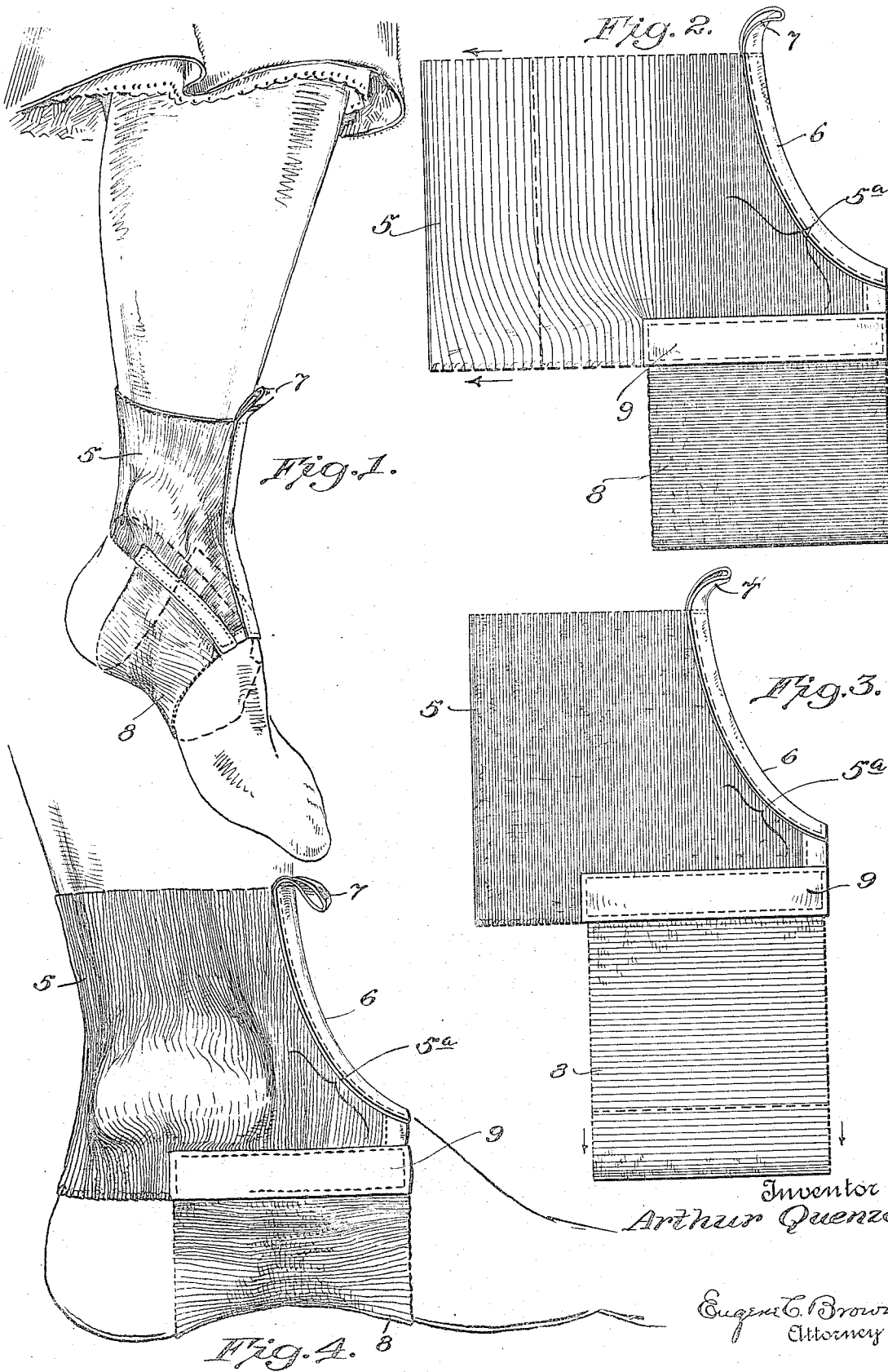
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A. QUENZER

ANKLE SUPPORTER

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Inventor
Arthur Quenzer

Eugene C. Brown
Attorney

UNITED STATES PATENT OFFICE.

ARTHUR QUENZER, OF BROOKLYN, NEW YORK.

ANKLE SUPPORTER.

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To all whom it may concern:

Be it known that I, ARTHUR QUENZER, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Ankle Supporters, of which the following is a specification.

This invention relates to devices for supporting and protecting the ankles and the arches of the feet. While it is especially useful in case of a sprain or other injury to the foot or ankle, it is also an exceedingly important adjunct to the equipment of athletes and those engaging in athletic sports.

One of the objects of my invention is to eliminate the leather front, such as I employed in my prior Patents Nos. 921,563 and 1,027,897, which tends to become stiff and hard from perspiration and usage. A further object is to avoid the use of seams over the tender parts of the foot, to provide an entirely smooth covering around the ankle, increasing the amount of elasticity and causing a more even pressure to be exerted throughout the supporter. Furthermore, my present improvement provides a combined arch supporter and reducer for the ankle.

In the following description, I shall refer to the accompanying drawings, in which—Fig. 1 is a perspective view showing my ankle supporter as it appears in position on the foot; Figs. 2 and 3 are side elevations of this supporter showing respectively the manner in which the ankle portion yields laterally and the arch portion yields downwardly; and Fig. 4 is a side elevation of the supporter illustrating how the elastic yields to conform to the shape of the foot.

My improved ankle supporter comprises an upper tubular ankle encircling member 5 made of a single integral piece of elastic knitted fabric formed with its longitudinally-extending warp-threads encircling the ankle, the ends of the fabric being united by a front binding tape 6 which may be formed into a loop 7 at the top, constituting a pulling tab; and an arch supporting member 8 comprising a single piece of elastic knitted fabric having its longitudinally-extending warp-threads encircling the arch of the foot, the ends of the fabric being bound to the lower edge of the ankle member by means of tapes 9 upon either side. By reason of this construction the ankle member

5 is elastic and yieldable in the direction of the width of the ankle so that it will yield freely to any of its movements, at the same time exerting a constant elastic restraint which supports the muscles and ligaments preventing sprains and relieving fatigue. Likewise, the elasticity of the arch member 8 permits it to conform closely to the configuration of the arch of the foot and exert a constant upward pressure which affords the necessary support, while at the same time yielding to every movement of the joints and muscles.

While the ankle member yields to any movements of the ankle in the direction of its width, the fabric is absolutely unyielding in the vertical direction so that it forms a firm and rigid support for the arch member across the instep. My present construction, therefore, possesses all of the advantages of prior devices in which the front portion of the ankle member was constructed of leather for the purpose of providing an unyielding support for the arch member, and it possesses advantages not found in prior devices in that it provides a smooth yielding elastic surface across the entire instep, affording greater freedom of movement, thereby adapting it especially to athletic exercises and permitting this portion to yieldingly conform to any irregularities or enlargements, such as may be caused by sprains or other injuries. While this region over the instep, which I have designated by the reference character 5^a will yield outwardly to any swellings or prominences, yet any downward strains, due to the pull and movements of the arch of the foot will not be communicated to this region above the binding tape 9 because of the unyielding character of the fabric of the ankle portion in a downward direction. This feature of providing a region across the instep which is freely elastic to movements transverse to the ankle and permits a bulging of the fabric due to swellings or enlargements arising from any cause, while affording a firm and unyielding support in a vertical or downward direction to receive the pull and strains exerted by the arch member, is entirely new in ankle supporting devices. Moreover, the construction of an ankle supporter entirely of fabric material and without any leather or the like which is subject to rapid deterioration and stiffening, is an improvement in devices of this

character which will be readily appreciated by those who have had experience with bandages and ankle supporting devices. By reason of this construction also my ankle supporter presents a very neat appearance and may be used with low shoes to protect the ankle and to serve as an ankle reducer.

I claim:—

5 An improved ankle support and protector,
10 comprising an ankle member consisting of a single strip of elastic webbing yieldable

only transversely of the ankle having its ends brought together and permanently united by a reinforcing tape extending centrally and longitudinally of the instep, and 15 an arch member consisting of a single strip of longitudinally yieldable elastic webbing secured to the bottom edge of the ankle member upon opposite sides by reinforcing 20 tapes.

In testimony whereof I affix my signature.
ARTHUR QUENZER.