

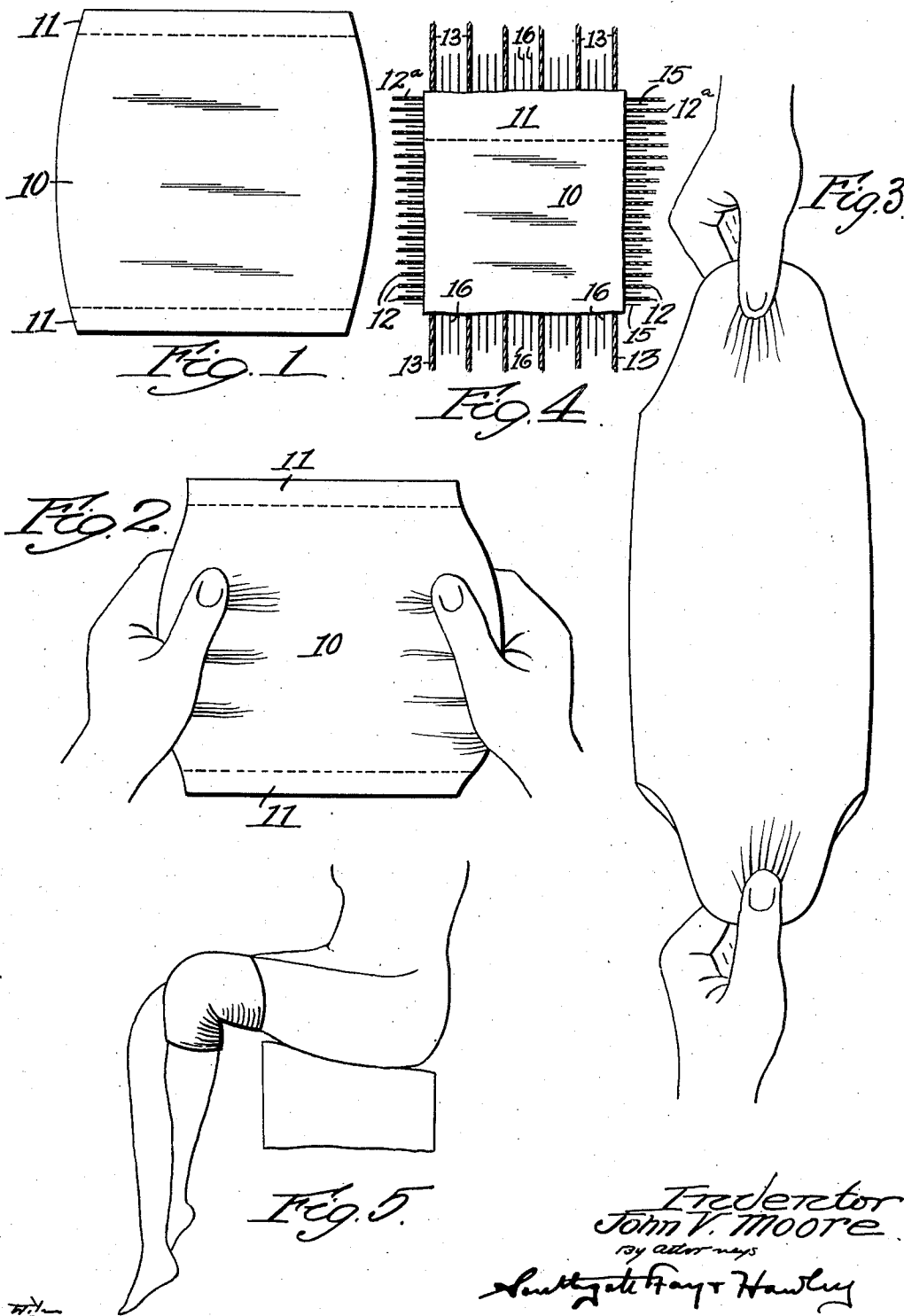
May 17, 1938.

J. V. MOORE

2,117,974

TUBULAR WOVEN ELASTIC GARMENT

Filed July 13, 1935



UNITED STATES PATENT OFFICE

2,117,974

TUBULAR WOVEN ELASTIC GARMENT

John V. Moore, Pawtucket, R. I., assignor to
Moore Fabric Company, Pawtucket, R. I., a cor-
poration of Rhode Island

Application July 13, 1935, Serial No. 31,158

1 Claim. (Cl. 139—421)

This invention relates to an elastic garment, such as a girdle or knee band, which is formed of a single piece of tubular woven elastic material stretchable circumferentially and also longitudinally.

It is the general object of my invention to provide such a garment having firm but yielding resistance to circumferential stretch but much more easily stretchable lengthwise. Such a garment, made in accordance with my invention, has been found exceptionally comfortable to the wearer when in use and particularly well adapted to its intended purposes.

My invention further relates to arrangements and combinations of parts which will be hereinafter described and more particularly pointed out in the appended claim.

A preferred form of the invention is shown in the drawing, in which

Fig. 1 is a side elevation of a girdle embodying my improvements;

Fig. 2 is a similar view illustrating the circumferential stretch of the garment;

Fig. 3 illustrates the longitudinal stretch of the garment;

Fig. 4 is a plan view of a portion of the elastic fabric, and

Fig. 5 illustrates my invention as embodied in a knee band.

Referring particularly to Fig. 1, I have shown my invention in the form of a tubular girdle having a body portion 10 and upper and lower edge portions 11. This garment is preferably formed from a single piece of elastic material woven in tubular form and having elastic weft threads 12 extending circumferentially and elastic warp threads 13 extending lengthwise of the garment. Preferably the elastic weft threads 12^a in the edge portions 11 are of smaller size or less strength than the weft threads 12 in the body portion 10.

It will be noted also by reference to Fig. 4 that the elastic warp threads 13 are spaced relatively widely apart, while the elastic weft threads 12 and 12^a are placed relatively close together. Additional non-elastic weft threads 15 and non-elastic warp threads 16 are commonly used but are interwoven when the elastic warp and elastic weft threads are under tension, so that they do not unduly limit the stretch thereof.

A garment formed of tubular woven elastic

material such as has been described is found to possess very important advantages when in use. The closely placed elastic weft threads 12 firmly but yieldingly resist circumferential stretch as indicated in Fig. 2, so that a strong circumferential confining pressure may be applied.

At the same time the garment is very easily yieldable lengthwise, so that a moderate force applied in a lengthwise direction will readily stretch the garment to double its length as indicated in Fig. 3. The relatively soft edge portions 11 have an "easing-off" effect and are much more comfortable to the wearer than the abrupt edges of the firm body portion which would otherwise be presented.

A garment thus constructed, when worn without attached garters, is found to firmly retain its vertical position, due to the easy longitudinal stretch, and shows no tendency to creep upward, a difficulty heretofore encountered in many garments of this general type. Furthermore the comfort of the wearer is greatly increased, as the garment stretches easily to accommodate itself to any bending movement, while at the same time it furnishes the desired contractive force circumferentially.

The same tubular fabric construction, when made of smaller size for use as a knee band, is found to possess the same advantages and by reason of the easy longitudinal stretch the bending movement of the knee is not interfered with while a firm circumferential force holds the knee cap in place. The application of the invention to other similar garments will be readily understood.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claim, but what I claim is:—

A one-piece seamless elastic garment woven tubularly and integrally and containing both elastic warp threads and elastic weft threads, said garment having a body portion firmly resistant to weft-wise stretch circumferentially but readily stretchable warp-wise longitudinally, and having upper and lower circumferential edge portions less resistant to circumferential weft-wise stretch than said body portion and formed with less strongly contractive elastic weft threads than said body portion.

JOHN V. MOORE.