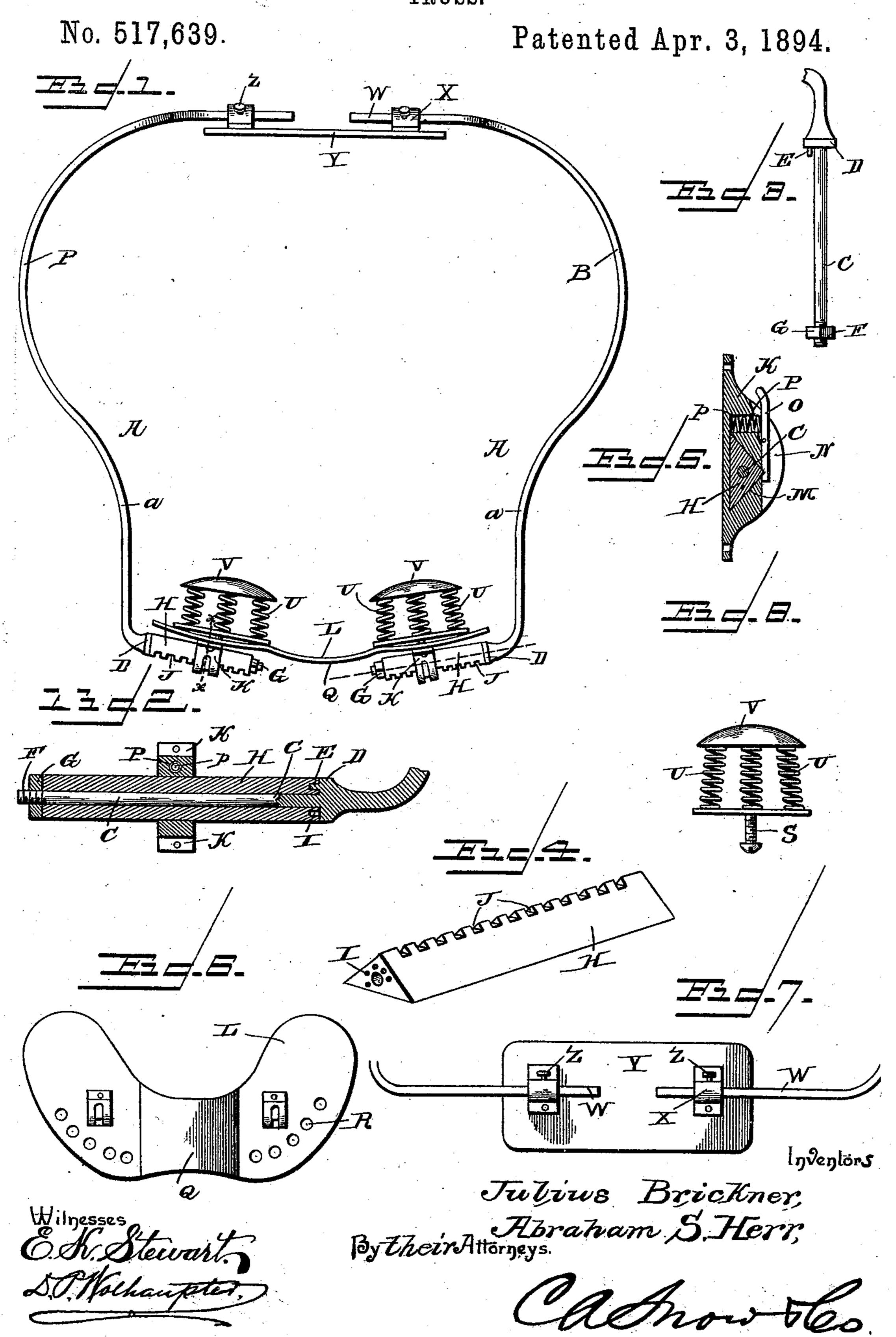
## J. BRICKNER & A. S. HERR. TRUSS.



## UNITED STATES PATENT OFFICE.

JULIUS BRICKNER AND ABRAHAM S. HERR, OF TIFFIN, OHIO.

## TRUSS.

SPECIFICATION forming part of Letters Patent No. 517,639, dated April 3, 1894.

Application filed May 22, 1893. Serial No. 475,053. (No model.)

To all whom it may concern:

Be it known that we, Julius Brickner and Abraham S. Herr, citizens of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented a new and useful Truss, of which the following is a specification.

This invention relates to trusses; and it has for its object to provide certain improvements in devices of this character whereby the same can be readily adjusted to fit the body of any person, while at the same time being capable of adjustment to adapt the truss to suit any particular hernia in order to provide for the firm retention thereof.

To this end the main and primary object of the present invention is to construct an improved truss having several novel adjustments which render the same especially useful for the retention and cure of hernia as well as for the purposes of an abdominal supporter, and in its several uses the improved truss can be quickly and readily adjusted in position so as to be worn with perfect ease and comfort.

With these and other objects in view, which will readily 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, and claimed.

In the accompanying drawings: -Figure 1 is a top plan view of a truss constructed in accordance with this invention. Fig. 2 is an 35 enlarged detail sectional view of one end of one of the body band sections including the circularly adjustable clamp collar thereon. Fig. 3 is a detail elevation of the construction included in Fig. 2, with the clamp collar re-40 moved. Fig. 4 is a detail in perspective of the said clamp collar. Fig. 5 is an enlarged detail sectional view on the line x-x of Fig. 1. Fig. 6 is a detail elevation of the front pad plate. Fig. 7 is a similar view of the 45 back pad plate. Fig. 8 is a detail plan view of one of the truss pads and its attaching pad disk.

Referring to the accompanying drawings, A represents a metallic spring body band constructed of any suitable spring metal. The said spring body band A, comprises the separate members a, each of which is outwardly

bowed as at B, to conform to the shape of the body at the hips, and each of said body band sections or members terminates at its front 55 end in the angularly disposed spindle C, at the base of which are formed the shoulders D, and from which shoulders project the lock studs or pins E. Said spindle ends C, of the body band sections or members are disposed 60 at such an angle to the main portion of the body band, as to project transversely across the front of the body when the truss is applied, in order to provide for properly adjusting the truss pads in position to the affected 65 parts. The outer extremities of the spindle ends C, of the body band sections are threaded as at F, to removably receive the clamping nuts G, which are adapted to clamp against the outer ends of the circularly adjustable 70 clamp collars H. The circularly adjustable clamp collars H, are triangular in cross section, and are provided at their inner ends with a series of stud openings I, any one of which is adapted to be held in locking engagement with 75 the lock stud E, of each of the body band sections by means of the nut G, clamping thereon. This construction provides means whereby the clamp collars can be circularly adjusted on the ends of the body band sections, and held 80 in their adjusted positions, so that the proper disposition may be given to the pad devices to be presently described. The circularly adjustable triangular clamp collars H, are provided in the outer apices or edges thereof 85 with a longitudinal series of locking notches J, extending from end to end thereof, and said clamp collars loosely receive thereon the slide collars or lugs K. The slide collars or lugs K, are rigidly secured to one side of the 90 front pad plate L, near the opposite ends thereof, and are provided with the triangular openings M, which loosely embrace the triangular clamp collars H, in order to provide means for readily sliding the said collars or 95 lugs on the clamp collars in order to regulate the front width of the truss, and said slide collars or lugs K, are further provided with the outer bifurcations N, in which are pivoted the finger lock levers O, behind which 100 are arranged the springs P, located in the sockets p, formed in the slide collars or lugs K, and providing means for normally holding one end of said finger lock levers into engage-

ment with any one of the series of locking notches J, formed in the outer edges of the clamp collars H. By reason of the construction just described the front width of the 5 truss may be properly regulated according to the size of the person to which the same is being fitted, while at the same time efficient means are provided for adjusting the front pad plate L, to any desired angle in order to ro properly set the pitch of the pads to which reference will be presently made. Said front pad plate L, is provided with a central bowed portion Q, which conforms to the configuration of that portion of the body to which it is 15 applied, and is further provided at opposite ends thereof below the slide collars or lugs thereon with a series of perforations R, any one of which is adapted to removably receive the attaching screws S, passing therethrough 20 and engaging at their inner ends, inside of the front pad plate, the pad supporting disks T. These pad supporting disks T, have secured thereto one end of a series of off-standing spiral springs U, the outer ends of which 25 are securely attached to the convex front truss pads V. The said front truss pads V, are constructed of any suitable material of which pads are ordinarily constructed, and by reason of the spring support therefor, the same yield 30 readily to any movement of the body without becoming displaced from the position in which they are adjusted, and it will be apparent that the specific attachment of the pads to the front pad plate L, provides means where-35 by the said pads may be adjusted in an arc of a circle independently of the front pad plate, in order to secure every possible adjustment which is necessary for properly fitting a truss to the body of a person.

The body band members or sections a, terminate at their rear extremities in the right-angularly disposed attaching ends W, which are adjustably received by the plate collars X, secured to the rear side of the back pad plate Y, and said plate collars accommodate the set screws Z, passing therethrough and impinging on the rear extremities of the body band sections, thereby providing means for attaching the back pad plate to the rear portion of the body band and at the same time providing means for adjusting the rear width of the truss.

The several parts of the truss herein described may be constructed of any suitable material, and all exposed and wearing parts thereof covered in the ordinary manner if desired and necessary, and we will have it understood that changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. In a truss, a body band, circularly adjustable clamp collars fitted on the front ends of said body band, and having locking notches in one edge, a front pad plate connecting the front ends of the body band and having spring 70 locks adapted to engage the notches of said clamp collars, substantially as set forth.

2. In a truss, the combination of the body-band, circularly-adjustable clamp-collars fitted on the front ends of said body-band, a 75 front pad-plate connecting the front ends of the body-band and having slide collars adapted to loosely embrace said clamp-collars, and means for locking said slide-collars at any adjusted position on said clamp-collars, substantially as set forth.

3. In a truss, a body band having spindles at its front extremities and lock studs at the base of said spindles, circularly adjustable clamp collars adapted to be clamped on the 85 said spindles and having stud openings in one end adapted to engage the lock studs at the base of the spindles, and a front pad carrying plate having slide collars or lugs adjustably engaging said clamp collars, sub- 90 stantially as set forth.

4. In a truss, a sectional body band terminating at its front extremities in spindles and having projecting lock studs at the base of said spindles, circularly adjustable clamp 95 collars clamped on the said spindles and having stud openings in one end engaging said lock studs and a longitudinal series of locking notches in one edge, a front pad carrying plate having slide collars or lugs loosely emplate having slide collars or lugs loosely emplacing the clamp collars, and spring locks arranged on the slide collars or lugs and adapted to engage the locking notches of said clamp collars, substantially as set forth.

5. In a truss, a sectional body band terminating at its front extremities in spindles, angular clamp collars circularly adjustable on said spindles and adapted to be clamped thereon, said clamp collars being provided with a longitudinal series of locking notches in one edge, a front pad carrying plate, slide collars or lugs attached to one side of said plate near its opposite ends and provided with angular openings loosely embracing the angular clamp collars, and spring-actuated inser lock levers mounted on said slide collars or lugs and adapted to normally engage the locking notches of said clamp collars, substantially as set forth.

JULIUS BRICKNER. ABRAHAM S. HERR.

Attest:

R. W. Brenn, Henry T. Heller.