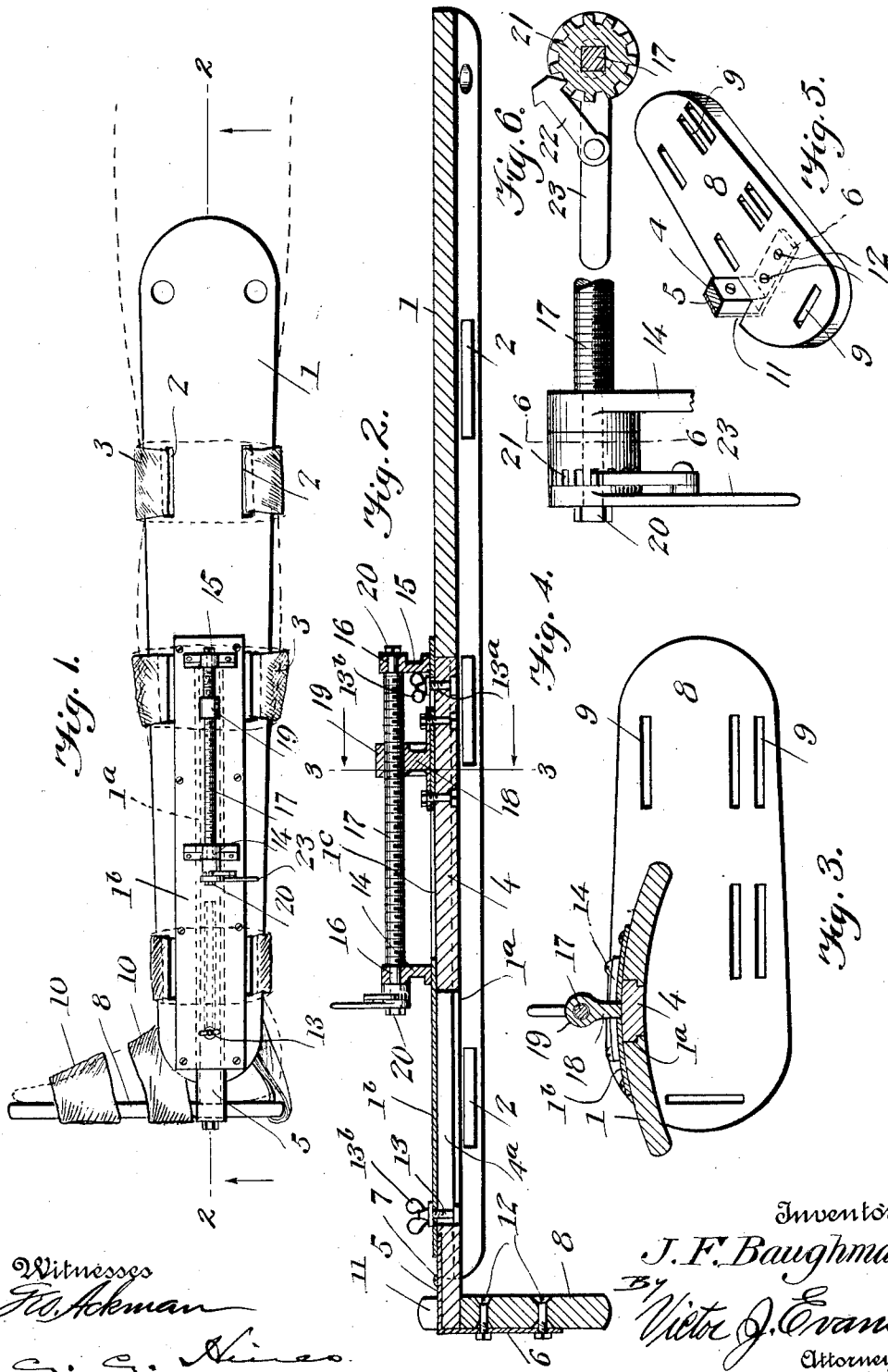


J. F. BAUGHMAN.
ADJUSTABLE SPLINT.
APPLICATION FILED JULY 1, 1913.

1,089,305.

Patented Mar. 3, 1914.



Witnesses
W. Ackman
C. C. Hines

Inventor
J. F. Baughman
By *Victor J. Evans*
Attorney

UNITED STATES PATENT OFFICE.

JOHN F. BAUGHMAN, OF AUBURN, INDIANA.

ADJUSTABLE SPLINT.

1,089,305.

Specification of Letters Patent.

Patented Mar. 3, 1914.

Application filed July 1, 1913. Serial No. 776,877.

To all whom it may concern:

Be it known that I, JOHN F. BAUGHMAN, a citizen of the United States, residing at Auburn, in the county of Dekalb and State of Indiana, have invented new and useful Improvements in Adjustable Splints, of which the following is a specification.

This invention relates to adjustable splints designed for use in reducing the fracture of a broken limb, the object of the invention being to provide a device of this character which obviates the employment of the usual weights and pulleys, which is extensible to accord with the length of the limb and to place and maintain any desired tension upon the limb to hold the ends of the fractured bone in proper relation while knitting, and which is adaptable for use upon either the right or the left limb.

The invention consists of the features of construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:

Figure 1 is a side elevation showing the application of the invention. Fig. 2 is a vertical longitudinal section through the device. Fig. 3 is a transverse section on the line 3—3 of Fig. 2. Fig. 4 is a detail plan view of the ratchet lever and cooperating parts. Fig. 5 is a similar view of the foot rest and its supporting bracket. Fig. 6 is a detail section on the line 6—6 of Fig. 4.

Referring to the drawing, 1 designates the body portion or stationary section of the splint, which is provided with slots or openings 2 at intervals for the passage of bandages 3 to secure the splint to the limb. As shown, said section 1 is curved or concaved in cross section to fit the limb and is secured in practice upon the outer side thereof.

Slidably connected with the body or stationary section 1 is a longitudinally adjustable section 4, which at its outer end is grooved to receive a bracket 5 having a right angularly bent arm 6 arranged to extend laterally beyond the concaved face of the section 1, said bracket being fastened to the section 4 by one or more securing screws or bolts 7.

The arm 6 of the bracket supports a foot rest plate 8 which is provided with slots or openings 9 therein for the passage of bandages 10 to secure the same to the foot of the limb to which the device is applied. The heel portion of the foot rest plate is formed

at one side with a notch or recess 11 receiving the outer end of the section 4 and the body of the bracket, the arm 6 of which latter extends across and beneath the foot rest plate and is detachably secured thereto by fastening bolts 12. The foot rest plate is thus firmly connected with the bracket against possibility of accidental displacement, and at the same time may be reversed in an obvious manner for use in the application of the device to either the right or the left limb.

The section 1 is provided, with a longitudinal guide slot 1^a in which the section 4 is slidably mounted. The outer side of this slot is closed by a cover and retaining plate 1^b secured to said section 1. Guide slots 1^c and 4^a are also provided in the cover plate and section 4, and bolts 13 and 13^a, provided with wing nuts 13^b, are respectively carried by said plate and section 4 and engage the said slots 1^c and 4^a to maintain the parts in guided relation and limit the downward movement of the section 4.

The plate 1^b, which forms a fixed part of section 1, carries posts 14 and 15 which are provided with bearing openings 16 for the journals of a threaded shaft 17. Secured to the section 4 and projecting upward through and movable in the slot 1^c is a bracket 18 formed to provide a nut 19 through which the shaft extends, the threads of the shaft and nut being in working engagement and properly pitched so that by turning the shaft in one direction or the other to a determined degree the section 4 will be longitudinally adjusted in or out to a determined extent upon the section 1.

The shaft 17 is provided with retaining nuts 20, and one end of said shaft extends beyond the adjacent post 14 and carries a ratchet toothed head or clutch member 21 which is fixed thereto and which is adapted to be engaged by the ratchet toothed head or portion 22 of an adjusting lever 23. When the lever is moved in one direction its teeth engage the teeth of the clutch head to effect a turning of the shaft in the proper direction to adjust the splint section 4 outwardly, while upon the reverse movement of the lever its teeth will ride over the teeth of the clutch head, thus allowing the lever to be turned back for a succeeding feed up motion without turning the shaft backwardly.

In the use of the device, after the limb has been set and placed in the usual bandage

or cast, the splint is applied and the body and foot rest sections secured to the leg and foot of the wearer. By then adjusting the extension section 4 by means of the ratchet lever mechanism the foot rest may be moved outwardly to place the required tension on the muscles of the leg, whereby the ends of the bone may be maintained in proper relation during the process of knitting without the use of the weights, pulleys and cords commonly employed. As before stated, the foot rest may be reversed for interchangeable use in the application of the device to a right or left limb.

15 I claim:—

1. An adjustable splint comprising a body section having a longitudinal guide way, a cover plate closing said guide way and having a longitudinal slot therein, an extension section slidably fitted in said guide way, a foot rest carried by said extension section, spaced posts upon the cover plate, a screw shaft journaled in said posts, a nut engaging said shaft and carried by the extension section and movable in the slot of the cover plate, and ratchet mechanism for actuating said shaft to adjust said nut and extension section.

2. An adjustable splint comprising a body section having a longitudinal guide way opening through its outer face and end, a cover plate secured to the outer face of said body section and closing said guide way,

said cover plate having a longitudinal slot therein, an extension section slidably adjustable in said guide way, said extension section being provided with a longitudinal slot, a foot rest carried by the extension section, stop members respectively upon the cover plate and extension section arranged to travel in the slots in the extension section and cover plate to limit the sliding movements of said extension section, spaced posts upon the cover plate adjacent the opposite ends of the slot therein, a screw shaft journaled in said post, ratchet mechanism for revolving said shaft, and a nut carried by the extension section and projecting through the slot in the cover plate and engaging said screw shaft.

3. An adjustable splint comprising relatively adjustable body and extension sections, adjusting means therefor, a foot rest provided at its heel portion with a side recess to receive the end of the extension section, and a bracket fixed to the end of the extension section and having an angular arm extending through said recess and under said foot rest and detachably secured to the latter.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN F. BAUGHMAN.

Witnesses:

JOHN R. McDOWELL,
JESSE W. SIBERT.