March 16, 1926. 1,576,583

J. F. ENGLAND

COLLAPSIBLE AND EXTENSIBLE TRESTLE

Filed June 23, 1925 2 Sheets-Sheet 1

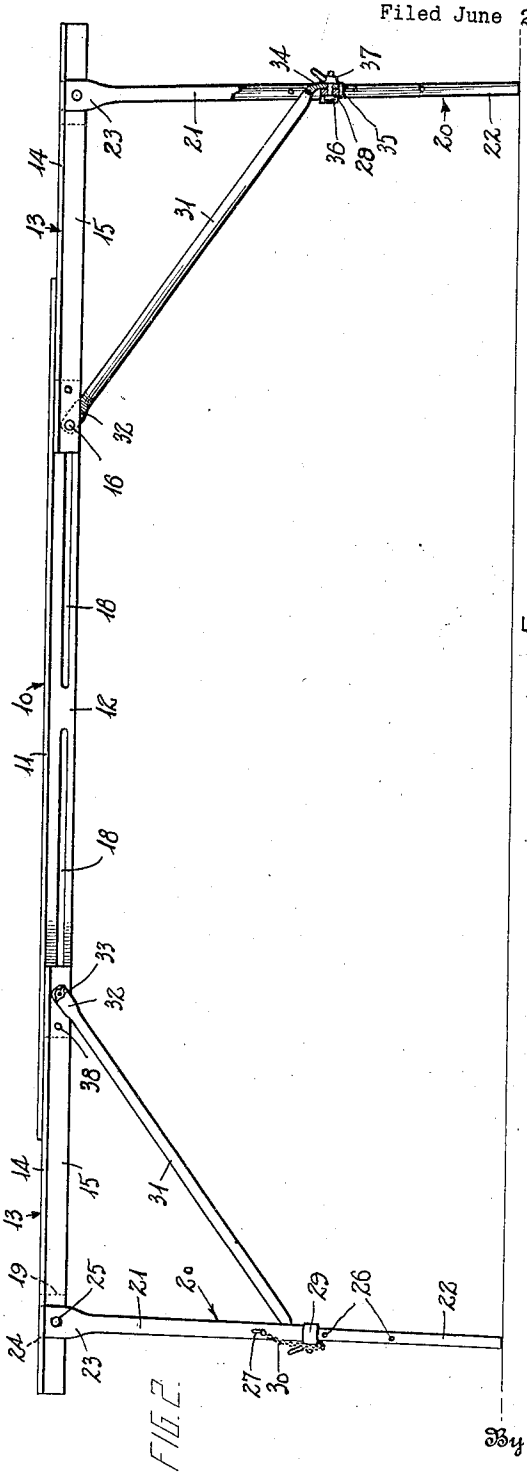


FIG. 2.

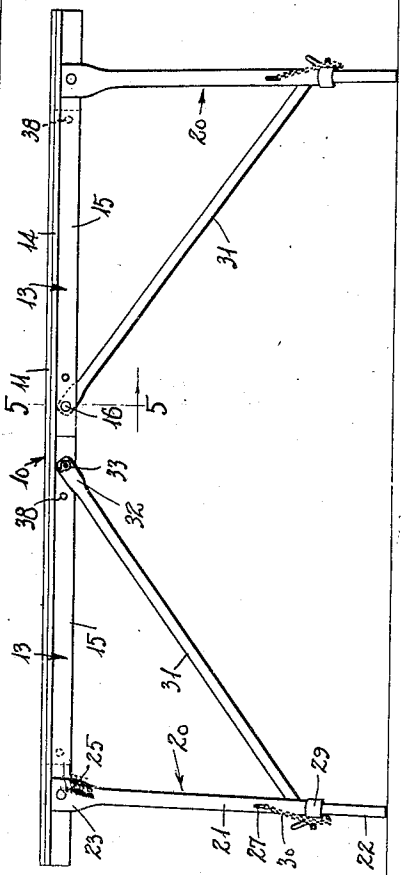


FIG. 1.

Inventor:
James F. England,
By Monroe A. Miller
Attorney.

March 16, 1926.

1,576,583

J. F. ENGLAND

COLLAPSIBLE AND EXTENSIBLE TRESTLE

Filed June 23, 1925

2 Sheets-Sheet 2

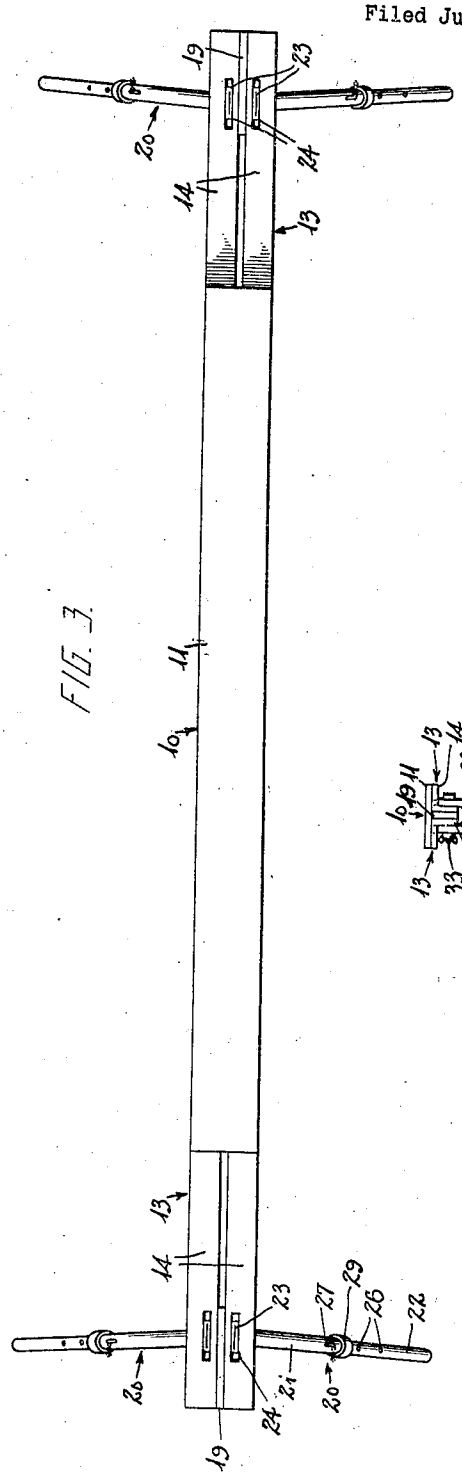


FIG. 3.

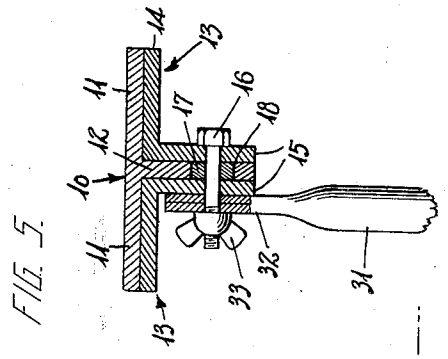


FIG. 5.

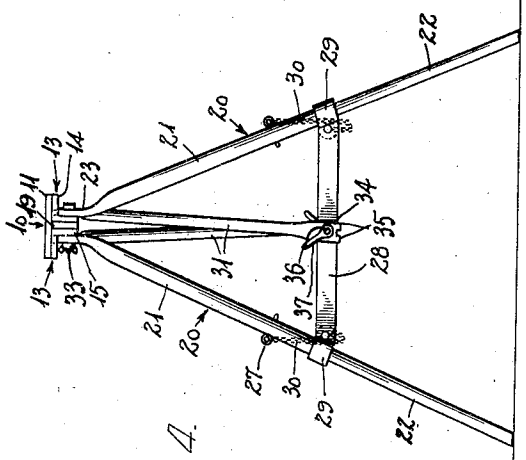


FIG. 4.

Inventor

James F. England,

By Monroe C. Miller

Attorney.

Patented Mar. 16, 1926. 1,576,583

UNITED STATES PATENT OFFICE.

JAMES FREDRICK ENGLAND, OF LEBANON, MISSOURI.

COLLAPSIBLE AND EXTENSIBLE TRESTLE.

Application filed June 23, 1925. Serial No. 39,112.

To all whom it may concern:

Be it known that I, JAMES F. ENGLAND, a citizen of United States, residing at Lebanon, in the county of Laclede and State of Missouri, have invented certain new and useful Improvements in Collapsible and Extensible Trestles, of which the following is a specification, reference being had therein to the accompanying drawing.

The present invention relates to trestles such as used by painters, paper hangers, and others, and aims to provide a novel and improved trestle which is extensible to be adjusted to different sizes and which is also collapsible in order that it may be knocked down for compact storage or transportation.

A further object of the invention is to provide a trestle of the kind indicated comprising a novel construction and assemblage of the component elements, whereby the device, although simple in construction, is convenient and advantageous in use.

With the foregoing and other objects in view, which will be apparent as the description proceeds, the invention resides in the construction and arrangement of parts, as hereinafter described and claimed, it being understood that changes can be made within the scope of what is claimed, without departing from the spirit of the invention.

The invention is illustrated in the accompanying drawings, wherein—

Figure 1 is a side elevation of the trestle with the beam and legs contracted.

Fig. 2 is a similar view showing the beam and legs extended.

Fig. 3 is a plan view of the trestle with the parts extended as seen in Fig. 2.

Fig. 4 is an end view of the trestle with the legs extended.

Fig. 5 is an enlarged cross section on the line 5—5 of Fig. 1.

An extensible beam is provided composed of intermediate and end sections that are conveniently made from structural iron or steel. Thus, the intermediate section 10 comprises a T-iron having the upper flanges 11 and the depending flange or web 12. The end sections 13 of the beam are composed of angle irons having the upper flanges 14 and the depending flanges 15. Each end section comprises a pair of angle irons, and the inner end portions of the angle irons overlap the section 10 at the opposite sides thereof, with the flanges 15 overlapping and bearing slidably against the flange 12 and the flanges 14 overlapping and bearing slidably against the under surfaces of the flanges 11. Clamping bolts 16 extend transversely through the flanges 15 near the inner ends of the end sections 13, and have rollers 17 thereon working in longitudinal slots 18 with which the flange 12 is provided, thereby slidably connecting the sections of the beam. Spacers 19 are secured between the outer end portions of the angle irons of the end sections, to space said angle irons apart, and the ends of the flange 12 are cut away below the end portions of the flanges 11 in order that the end sections may be moved completely under the intermediate section, the spacers 19 being movable under the flanges 11, as seen in Fig. 1.

Two pairs of legs 20 are provided, one pair at each end of the beam, and the legs are also extensible in order to adjust the height of the beam. Each leg is composed of the upper and lower tubular sections 21 and 22, respectively, which telescope together, the section 22 fitting slidably within the section 21. The upper terminals 23 of the sections 21 are flattened to bear against the opposite sides of the flanges 15, and the flanges 14 have slots 24 to receive the upper extremities of the sections 21. Pins 25 extend transversely through the flanges and spacers 19 and the upper end portions of the legs are apertured to engage over said pins. In assembling the parts, the upper end portions of the legs are engaged over the pins 25 with the legs swung longitudinally at acute angles to the beam, and then when the legs are swung to position, their upper ends move into the slots 24, thereby holding the legs on the pins 25. The lower sections 22 of the legs have apertures 26 for the engagement of pins 27 that are inserted through the sections 21, in order to maintain the legs adjusted for different heights.

A cross bar or brace 28 is provided between each pair of legs, being formed at the ends thereof with loops or eyes 29 loosely embracing the sections 22 and abutting the lower ends of the sections 21. Said cross bars or braces thus prevent the legs from spreading apart. Chains or flexible elements 30 connect the pins 27 and cross bars 28, to prevent said pins being lost or mislaid.

Inclined braces 31, which are preferably of tubular stock, have flattened upper terminals 32 overlapping the inner end portions of the flanges 15 at opposite sides and engaging the bolts 16, which have wing nuts

33 to clamp said braces to the end sections of the beam. The lower end portions 34 of the braces 31 are flattened and bent downwardly to extend across the cross bars 28, and said portions 34 have lugs 35 to engage under said cross bars. Bolts 36 engage through the portions 34 and cross bars 28 to clamp the braces 31 to said cross bars, and said bolts have tail nuts 37 that can be conveniently rotated by hand. The braces 31 prevent longitudinal displacement of the legs relatively to the beam, and render the structure more rigid.

By loosening the nuts 33 of the bolts 16, the beam is readily adjusted to lengthen and shorten the trestle, and by removing the pins 27, the legs are readily adjusted to regulate the height of the trestle. The parts may also be readily separated for collapsing or knocking down the trestle. Thus, the bolts 16 and 36 may be readily removed, so that the parts may be separated quickly and conveniently. The legs 20 and braces 31 are therefore readily detached from the beam, and the braces 31 are readily detached from the cross bars 28. Said cross bars are also readily removed from the legs, so that the parts may be placed together within small space.

The flanges 12 and 15 have apertures 38 adapted to register when the beam is fully extended, so as to receive pins, bolts or other elements, which will prevent the beam from being adjusted accidentally.

It is also possible to detach the legs 20 and braces 31 from the beam 10 and to attach said legs and braces to a wooden bar or beam when an adjustable beam is not wanted.

Having thus described the invention, what is claimed as new is:—

1. A trestle comprising a beam composed of intermediate and end sections, said intermediate section constituting a T-iron with upper and depending flanges, each end section constituting a pair of members overlapping the opposite sides of the depending flange of said T-iron, said depending flange having longitudinal slots, clamping elements engaging through said pairs of members near their inner ends and working in said slots, the outer end portions of said pairs of members being secured together, said upper flanges of said T-iron overlapping and bearing on said members, and legs secured to said end sections near the outer ends thereof.

2. A trestle comprising a beam composed of intermediate and end sections, each having upper and depending flanges, with the depending flanges overlapping, the depending flange of the intermediate section having longitudinal slots, the upper flanges of the intermediate section overlapping the upper flanges of the end sections and bearing thereon, clamping elements carried by the depending flanges of the end sections near the inner ends thereof and working in said slots, and legs engaged with said depending flanges of the end sections near the opposite ends of said end sections, the upper flanges of said end sections having slots receiving the upper ends of said legs.

3. A trestle comprising a beam composed of intermediate and end sections, said intermediate section constituting a T-iron with upper and depending flanges, said end sections each constituting a pair of angle irons having upper and depending flanges overlapping the T-iron at opposite sides thereof, the depending flange of the T-iron having slots, clamping elements engaging through the depending flanges of the angle irons and working in said slots, a pair of legs secured to each end section, and braces connected to the legs and engaging said clamping elements.

4. A trestle comprising a beam having depending and upper flanges, pairs of legs, the upper end portions of said legs and depending flanges having portions to engage one another, the upper flanges having slots to receive the upper ends of said legs, and means for connecting the legs of each pair with one another and with the beam for bracing the legs and beam relatively to one another.

5. A trestle comprising a beam, pairs of legs having upper tubular sections secured to said beam and lower sections slidable in said upper sections, a cross bar for each pair of legs having loops at its ends loosely embracing the lower leg sections and abutting the lower ends of the upper leg sections, and inclined braces having their upper ends secured to said beam and having their lower end portions secured to said bars between the legs.

6. A trestle comprising an extensible beam having intermediate and end sections, the intermediate section having slots, clamping elements carried by the end sections and working in said slots, a pair of legs for each end section having upper sections secured to said end section and lower sections slidable in said upper sections, a cross bar for each pair of legs having loops at its ends loosely embracing the lower leg sections and abutting the lower ends of the upper leg sections, and inclined braces having their lower ends secured to said cross bars between the legs and having their upper ends engaging said clamping elements.

In testimony whereof I hereunto affix my signature.

JAMES FREDRICK ENGLAND.