W. H. SOUTH.

CARPENTER'S TRESTLE.

APPLICATION FILED MAY 31, 1913.

1,103,699. Patented July 14, 1914.

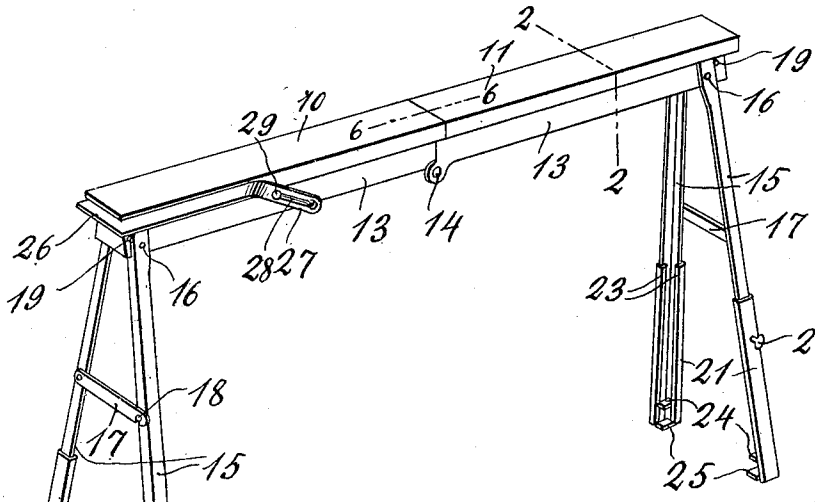


Fig. 1.

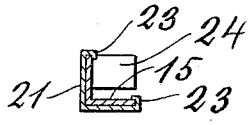


Fig. 5.

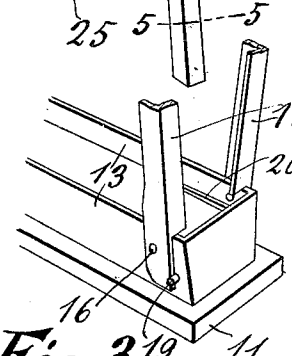


Fig. 3.

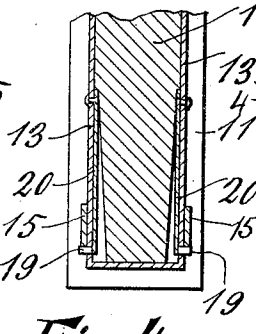


Fig. 4.

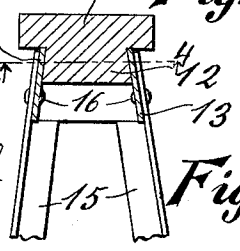


Fig. 2.

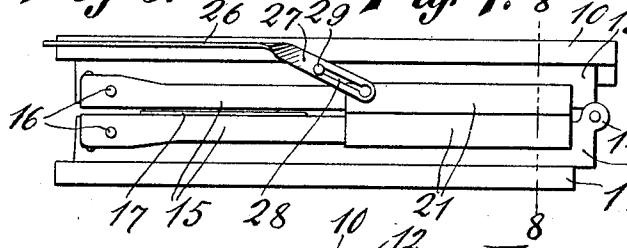


Fig. 7.

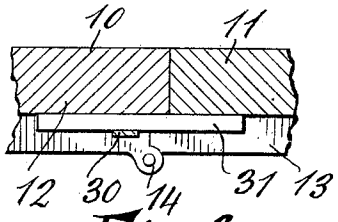


Fig. 6.

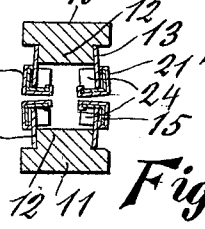


Fig. 8.

WITNESSES:

Einar Larson

E. F. Lamb

INVENTOR

William H. South.

BY

ATTORNEY

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM H. SOUTH, OF BOZEMAN, MONTANA.

CARPENTER'S TRESTLE.

1,103,699. Specification of Letters Patent. Patented July 14, 1914.

Application filed May 31, 1913. Serial No. 771,028.

To all whom it may concern:

Be it known that I, WILLIAM H. SOUTH, a citizen of the United States, residing at Bozeman, in the county of Gallatin and State of Montana, have invented certain new and useful Improvements in Carpenters' Trestles, of which the following is a specification.

This invention relates to carpenters' trestles which are foldable, and its object is to provide a trestle of this kind which can be folded into very small and compact form, and which, when unfolded for use, provides a firm and rigid support.

This object is attained by means of a novel combination and arrangement of parts to be hereinafter described and claimed, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of the trestle unfolded and set up ready for use. Fig. 2 is a cross-section on the line 2—2 of Fig. 1. Fig. 3 is a perspective view of one end of the trestle inverted. Fig. 4 is a horizontal section on the line 4—4 of Fig. 2. Fig. 5 is a cross-section on the line 5—5 of Fig. 1. Fig. 6 is a longitudinal section on the line 6—6 of Fig. 1. Fig. 7 is an elevation of the trestle in folded position. Fig. 8 is a vertical section on the line 8—8 of Fig. 4.

Referring specifically to the drawing, the top beam or bar of the trestle is in two sections, the same being indicated at 10 and 11, respectively. The under side of the sections are formed with a rib 12, so that the sections are T-shaped in cross-section. The sides of the rib are cut on a slant, so that the ribs are given a dovetailed shape in cross-section. The slant is outward from the top. To the slanting sides of the ribs are secured metal strips 13 extending throughout the entire length thereof, and continued around the ends. The width of the strips is such that they extend for a short distance downward from the bottom of the ribs. The inner ends of the strips of the respective top beam sections are connected by a hinge joint 14, which renders said sections foldable. The slant of the sides of the ribs gives a corresponding slant to the strips.

The trestle has a pair of legs 15 at each end, said legs being carried by the strips 13 adjacent to the outer ends thereof. Each leg is an angle iron having one of its flanges removed at the top, so that the other flange may be placed flat against the outer surface of the strip 13 and pivotally connected thereto, as indicated at 16. By reason of the slant of the strips 13, the legs are spread when they are swung downward into supporting position. One of the members of each pair of legs carries a cross brace 17 which is pivoted to said leg, and is adapted to be extended across to the opposite leg and hooked over a stud 18 thereon. Thus, the cross-braces may be disengaged and folded to lie alongside the legs to which they are pivoted.

Outward movement of each leg is limited by a stud 19 projecting from the strip 13 and engageable with the rear edge of the leg above the pivot 16. This stud passes through a hole in the strip, and is carried by the free end of a flat spring 20 secured to the inner face of the strip, said spring tending to keep the stud projected from the strip to engage the leg. The side of the rib 12 is cut away sufficiently at the end to accommodate the spring 20. Before the legs can be folded, the studs 19 must be pushed back so that the legs may clear the same, after which they can be folded.

The legs 15 may be provided with extensions 21 which are locked in adjusted position by set screws 22. These extensions are also angular in cross-section to conform to the cross-sectional shape of the legs, and the flanges of the extensions have hooks 23 to slidably engage over the edges of the flanges of the legs. The lower ends of the legs 15 have feet formed by cutting away one of the flanges for a short distance and bending the other flange into the angle, as indicated at 24, the latter thus forming a sufficiently wide surface to support the leg. The part 24 is spaced a short distance from the first-mentioned flange, so that when the leg is folded, the strip 13 may enter therebetween. Similar feet 25 are provided for the extensions 21.

Upon folding the legs, one of their flanges lies alongside the strip 13 on the outside thereof, and the other flange engages the bottom edge of the strip, the latter passing through the space between the parts 24 and 25 and the adjacent flange. Thus the legs may be folded close to the strips. After the legs are folded, the top beam sections 10 and 11 may be folded, so that the trestle is still further reduced in compass.

One of the top beam sections carries a steel square 26, one arm of which lies in a recess in the end thereof. The other arm of the square has a tongue 27 provided with a longitudinal slot 28 to receive a pin 29 carried by the strip 13. One end of the slot is enlarged, so that the head of the pin may pass therethrough, to permit removal of the square. The under side of the rib 12 carries, in a guide 30, a cross bar 31 which is slid across the joint of the top beam sections, when the latter are unfolded, and serves as a brace to prevent collapse of the trestle.

The structure herein described provides a simple, strong and durable trestle, and one which can be readily unfolded for use, and which, when not in use, is foldable into very small and compact form.

I claim:

1. A trestle comprising a top beam having a bottom rib, strips secured to the sides of the ribs and depending therefrom, and legs pivoted to the depending portions of the strips to fold beneath the top beam, said legs being angular in cross-section and having a bottom portion extending into the angle, said bottom portion being spaced from one of the flanges of the legs to permit folding of the legs over the aforesaid strips.

2. A trestle comprising a top beam which is in sections, each of which has a bottom rib, strips secured to the sides of the ribs of each section, the strips of the respective sections being hinged together to permit folding of the sections, and legs pivoted to the strips to fold beneath the top beam, said legs being angular in cross-section and having a bottom portion extending into the angle, said bottom portion being spaced from one of the flanges of the legs to permit folding of the legs over the aforesaid strips.

3. A trestle comprising a top beam having a bottom rib, strips secured to the sides of the ribs and depending therefrom, legs pivoted to the depending portions of the strips, studs carried by the strips and projecting therefrom to engage the edges of the legs to limit their outward swing, said strips having apertures through which the studs extend, and springs secured to the inner faces of the strips and carrying the studs at their free ends.

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

WILLIAM H. SOUTH.

Witnesses:

ALFORD YERGEY,

JOHN W. YERGEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."