No. 721,637. PATENTED FEB. 24, 1903.

L. F. SCHILLING.

DRAWING BOARD TRESTLE.

APPLICATION FILED MAY 2, 1902.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

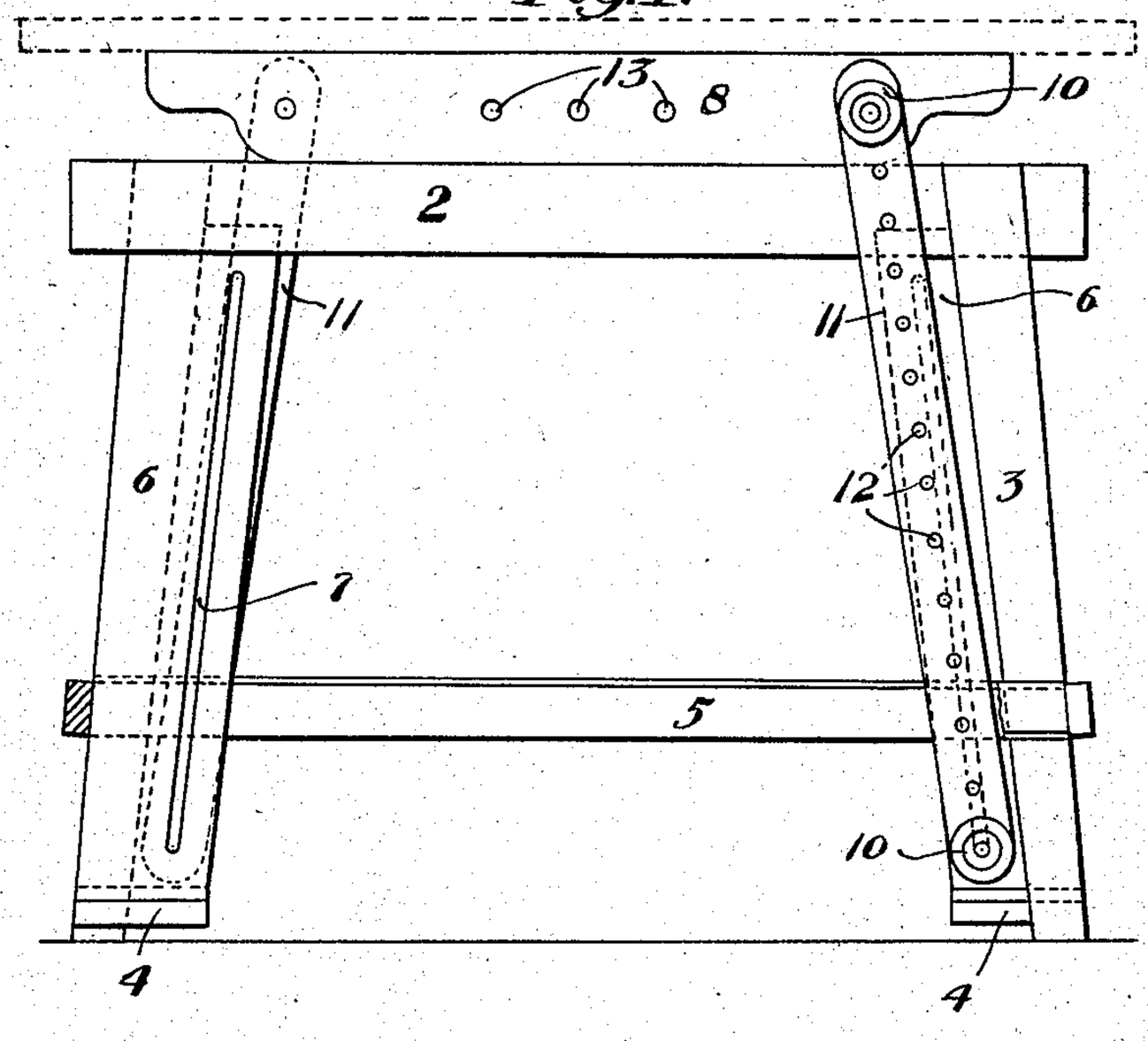


Fig. 2.

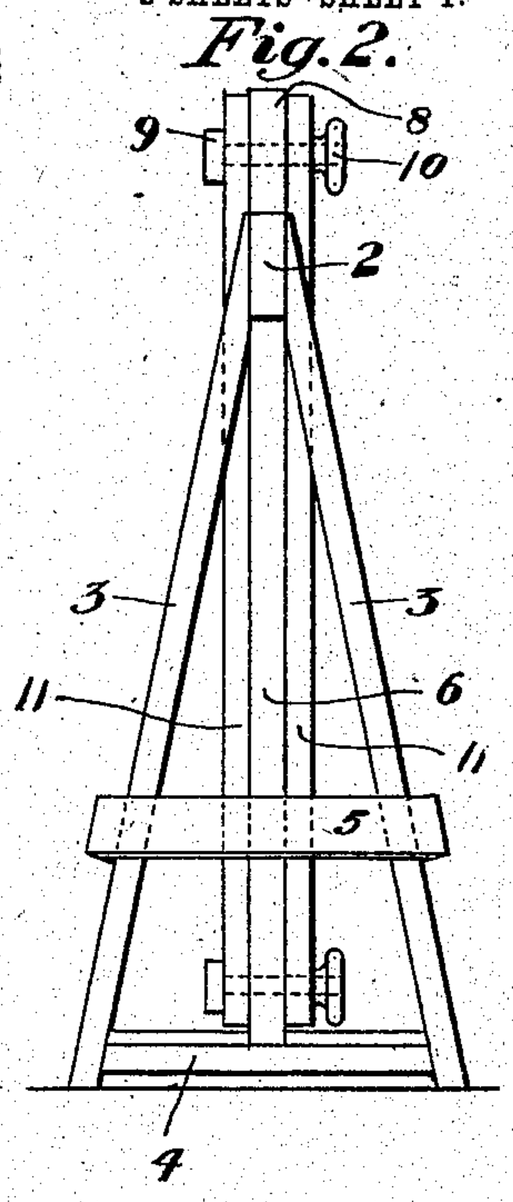
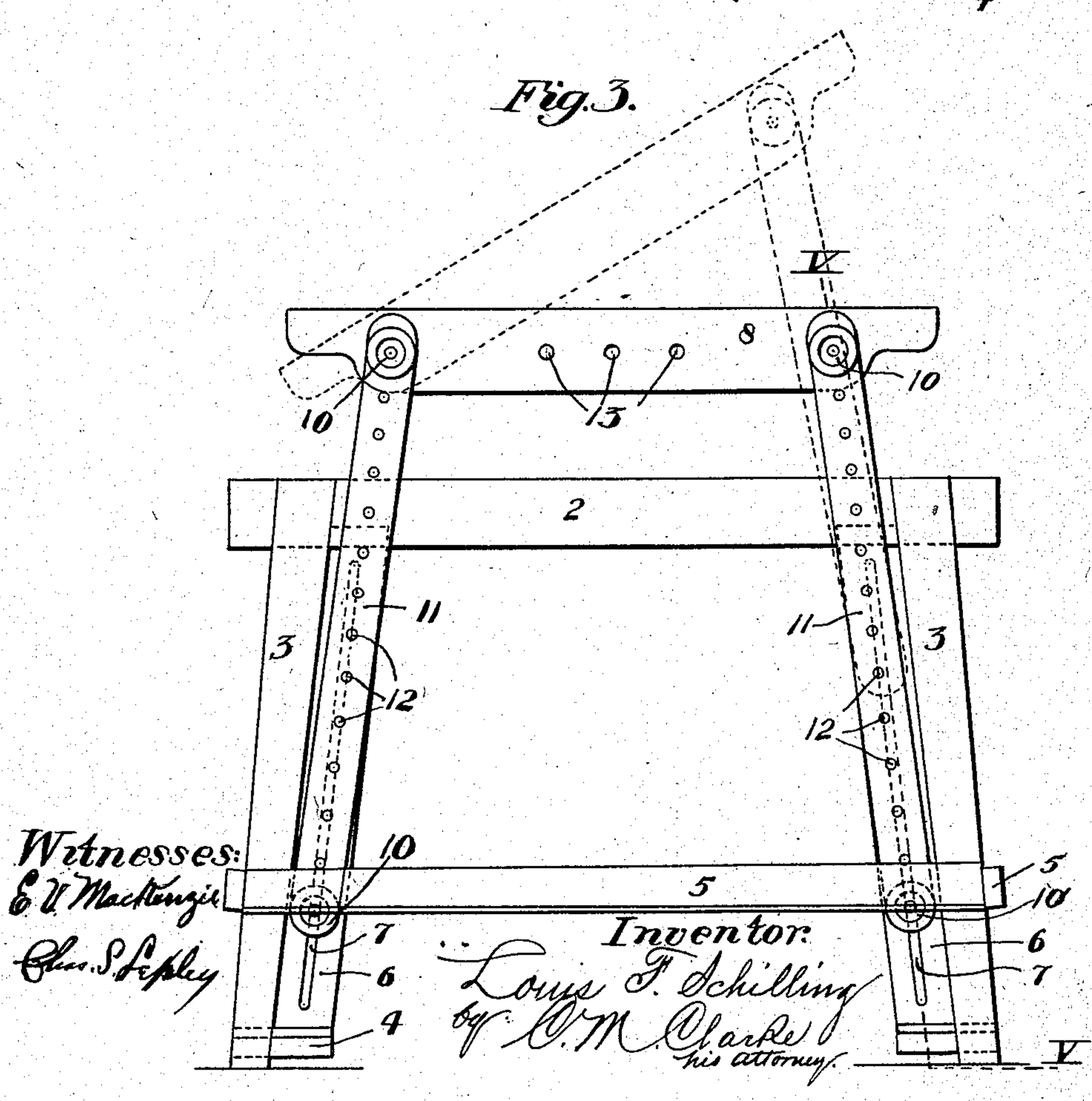


Fig. 3.



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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 4.

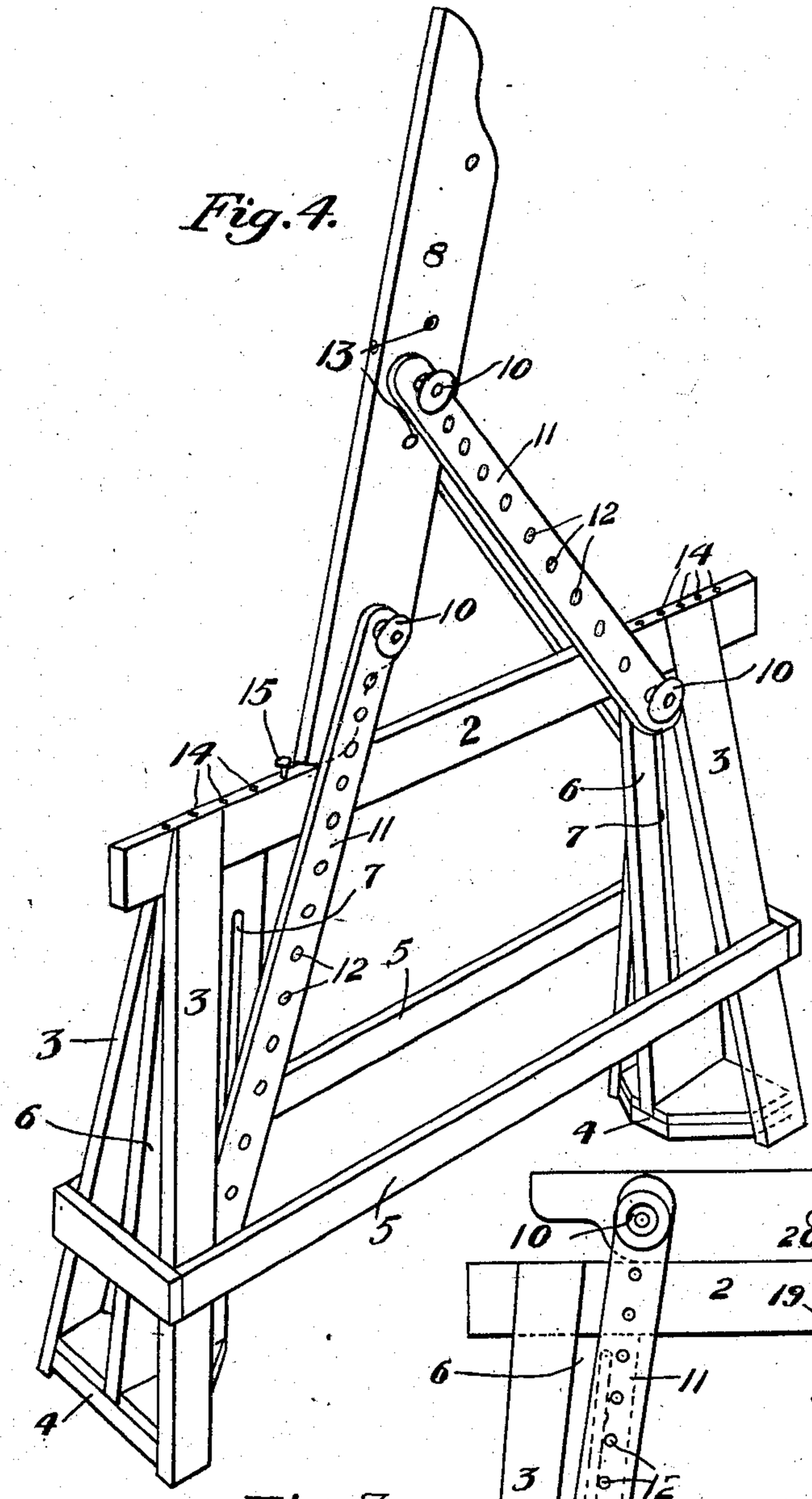


Fig. 5.

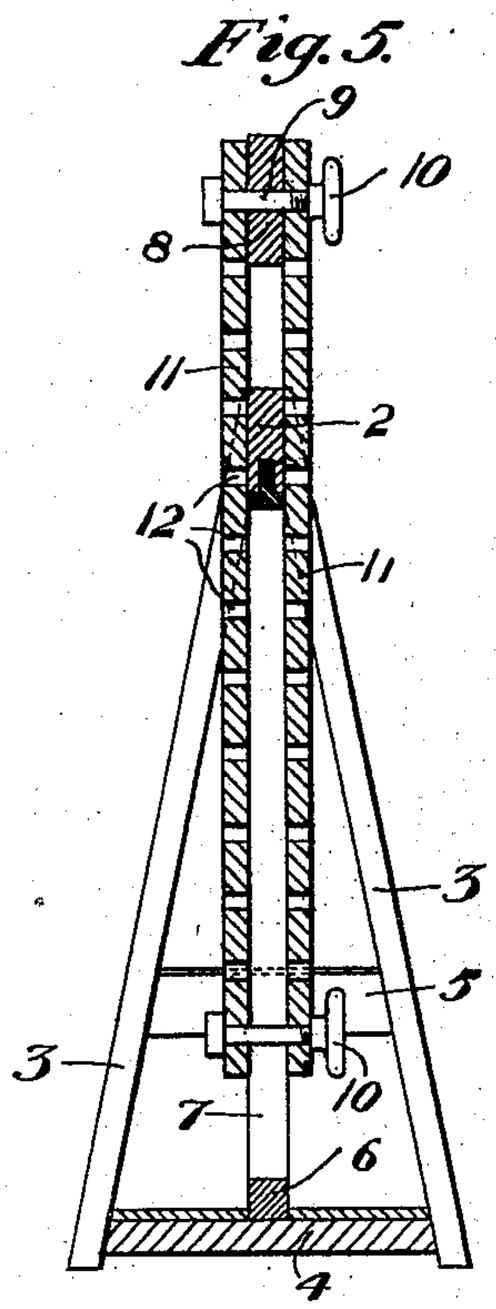


Fig. 6.

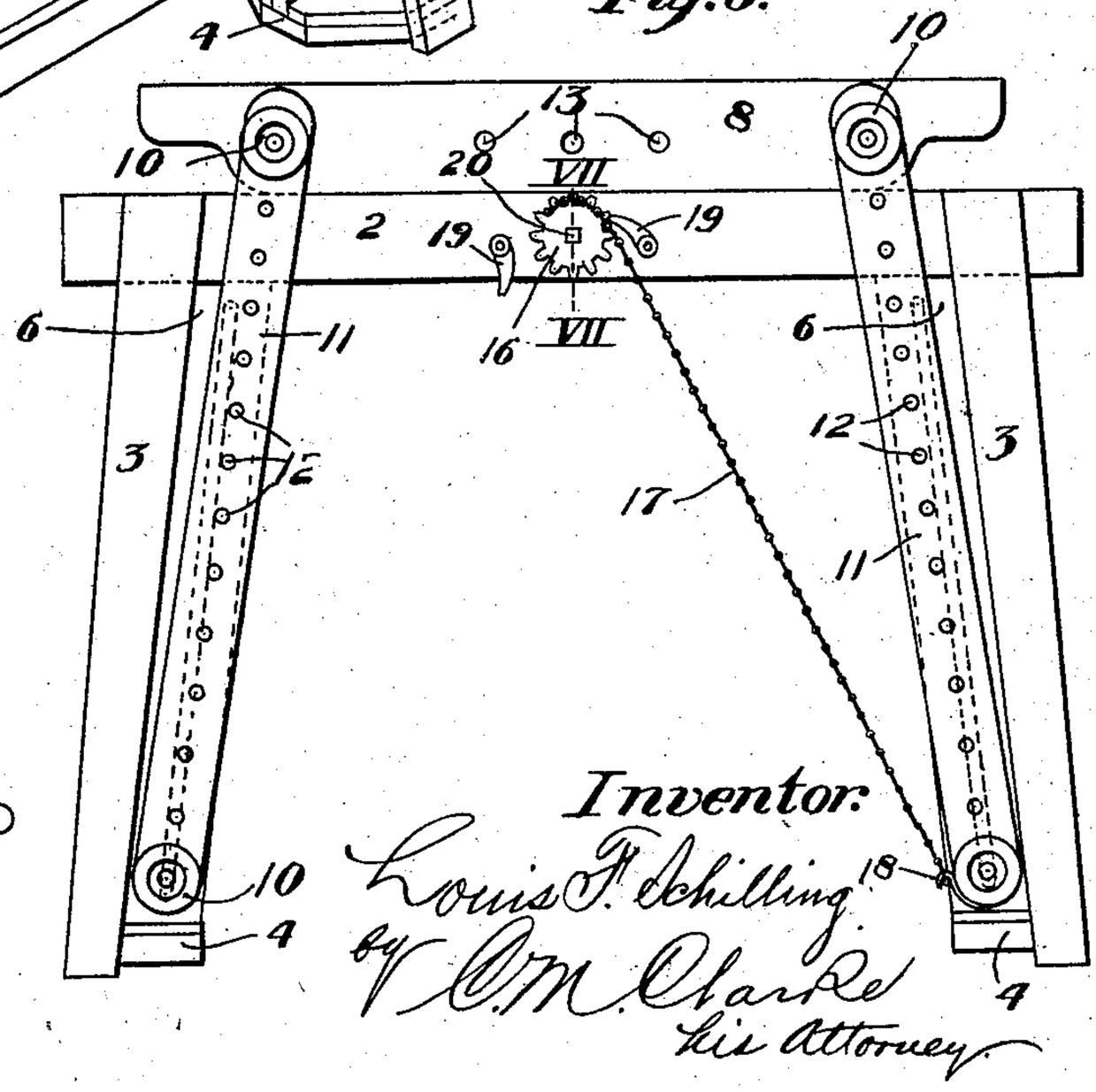
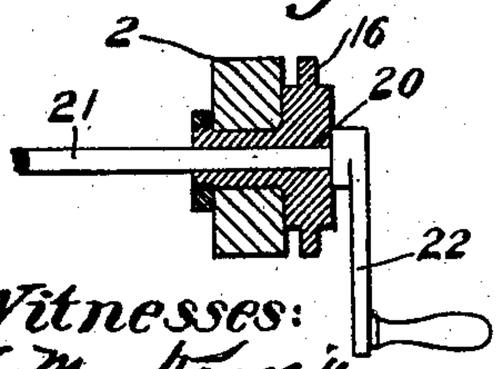


Fig. 7.



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UNITED STATES PATENT OFFICE.

LOUIS F. SCHILLING, OF SALEM, OHIO.

DRAWING-BOARD TRESTLE.

SPECIFICATION forming part of Letters Patent No. 721,637, dated February 24, 1903.

Application filed May 2, 1902. Serial No. 105,647. (No model.)

To all whom it may concern:

Be it known that I, LOUIS F. SCHILLING, a citizen of the United States, residing at Salem, in the county of Columbiana and State of Ohio, have invented certain new and useful Improvements in Drawing-Board Trestles, of which the following is a specification, reference being had therein to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a view in side elevation of my improved adjustable trestle, one of the supporting-bars being removed. Fig. 2 is an end view thereof. Fig. 3 is a view similar to Fig. 1, showing the top bar partially raised and indicating by dotted lines one of its slanting adjustments. Fig. 4 is a perspective view of the trestle, showing the top bar adjusted to a position for use as an easel. Fig. 5 is a vertical cross-sectional view on the line V V of Fig. 3. Fig. 6 is a view similar to Fig. 1, showing the application of a raising device for the bar-supports. Fig. 7 is a cross-sectional view of the raising device, on an enlarged scale, indicated by the line VII VII of Fig. 6.

My invention consists of an improvement in trestles for supporting drawing-boards or any other similar constructions; and it has for its objects to provide a trestle which shall be adjustable as to height and inclination of the upper supporting-bar independent of the under structure and means by which the upper bar may be rigidly supported and fixed in any of the varying positions to which it may be set, together with the construction of the underframe-work adapted to interfit with the adjustable portions and by which they are supported and maintained in a stable and rigid manner.

Referring to the drawings, 2 is the main stationary support of the trestle, mounted upon outwardly-extending legs 3 3 at each end, having cross supporting-braces 4 at the bottom, and preferably provided with cross longitudinal brace members 5, by which construction the trestle-underframe is rendered rigid and provided with a broad stable frame-base.

At each end of the structure, between the legs 3 3, extending into the bar 2, into which it is preferably mortised, extending down and resting upon the cross-supports 4, are the centrally-disposed arm-supporting posts 6 6, preferably slanted outwardly at each end in the same manner as the legs 3, each of which posts is provided with a longitudinal transverse slot 7.

8 is the upper adjustable supporting-bar, upon which one end of the drawing-board or other article is supported, which in the normal lowered position rests upon the rigid bar 2, as in Fig. 1. To the bar 8, by locking-bolts 9 and hand-wheel 10, are secured the raising-bars 11—one on each side of the bar 8 at each end—extending downwardly and embracing the sides of the bar 2 and post 6, to which the raising-bars are clamped at their lowered ends by means of a similar bolt and hand-wheel, as shown. These bolts—one for each pair of raising-bars at each end—are designed to solidly clamp both bars against the intervening members—to wit, either the upper bar 8 or the post 6—by which clamping action these members are rigidly held together and immovably connected at whatever position the bar 8 is adapted to.

When it is desired to raise the adjustable portion of the trestle horizontally, the raising-bars 11 at each end are set up for the same distance, the bolts 9 passing freely upwardly through slots 7, the upper bolts being slightly loosened for flexibility, and when raised to the desired height the bars 11 are tightly clamped against the sides of the supporting-posts by the hand-wheels, the upper bolts being also tightened in the same manner. As thus adjusted it will be seen that the raising-bars 11 are normally tightly secured against the sides of posts 6 and bar 8 and that they tightly embrace all that portion of the posts above the clamping-bolts, as well as the sides of the bar 2, so that as thus incorporated with the lower supporting-trestle structure the raising-bar practically forms an integral portion of it.

When it is desired to raise either end of the bar 8 at whatever elevation said bar may be in, both upper ends of the raising-bars 11 are slightly loosened, the lower ends of the bars or the side to be raised being also loosened, when the said bars are raised to whatever height it is desired, the parts being again tightened, thus locating bar 8 when in a slanting position. (Indicated in dotted lines in Fig.

3.) The bars 11 are provided with a series of bolt-holes 12, spaced at intervals, so that the bolt may be relocated whenever desired to suit varying positions or inclinations of the top bar 8. When it is desired to cause it to assume a more abrupt inclination which may approximate a vertical position, the upper securing-bolt at either end is withdrawn and the raising-bars are shifted over toward the middle, where they are again secured by passing the bolt through a hole 13, one or more of such holes being provided between the ends of the bar. When so adjusted, the trestle assumes the form and will perform the functions of an easel, and for the purpose of providing stops against which the article to be supported may bear a series of holes 14 are made in the upper edge of the bar 2, preferably at each end, into which a peg 15 is set, as clearly shown in Fig. 4.

In Figs. 6 and 7 I have shown a device for mechanically raising either end of the adjustable top bars, consisting in a chain-wheel 16, rotatably mounted in bar 2, (shown in Fig. 7,) carrying a chain 7, which may be secured at its lower end to a hook 18, mounted on the lower end of one of the raising-bars 11, by which upon turning the wheel 16 the bars and upper members 8 may be easily raised and then clamped into position, as has been described. The chain 7 may be hooked to one of the raising-bars at either end of a trestle, and so reverse the operation to raise the other end. For the purpose of locking the wheels against backward movement a pawl 19 is pivotally mounted on bar 2 at each side of the wheel, adapted to engage its teeth, as clearly shown in Fig. 6.

As will be understood, the trestles are designed to be used in pairs, so as to support each end of a drawing-board or similar construction in the usual manner, and when it is desired to raise both bars 8 simultaneously the wheels are provided with square or polygonal openings 20, through which a bar 21 of similar shape may be inserted, so as to engage both wheels and turn them together by a crank 22 on the end of the bar, as clearly shown in Fig. 7.

The advantages of this invention will be readily appreciated by all those accustomed to the use of drawing-table or other trestles, as it provides a very rigid and stable support and is capable of universal adjustment within a wide range of requirements.

Changes and variations may be made by the skilled mechanic without departing therefrom; but all such are to be considered as within the scope of the following claims.

What I claim is—

1. In a trestle, the combination of a main bar, supporting-legs therefor, vertical supporting-posts, an upper adjustable cross-bar, and raising-bars connected therewith and clamped to the supporting-posts, substantially as set forth.

2. In a trestle, the combination of a main bar, supporting-legs therefor, vertical slotted supporting-posts, an upper adjustable cross-bar, and raising-bars connected therewith and clamped to the supporting-posts, substantially as set forth.

3. In a trestle, the combination of a main bar, supporting-legs therefor, vertical slotted supporting-posts, an upper adjustable cross-bar, and raising-bars, pivotally connected therewith, and means for clamping the raising-bars to the supporting-posts, substantially as set forth.

4. In a trestle, the combination of an upper permanent main bar, supporting-legs and framework therefor, vertical slotted supporting-posts incorporated with the main bar and supporting-framework, an upper adjustable cross-bar, raising-bars pivotally secured thereto, and means for securing the raising-bars to the supporting-posts at varying heights, substantially as set forth.

5. In a trestle, the combination of an upper permanent main bar, supporting legs and framework therefor, vertical slotted supporting-posts incorporated with the main bar and supporting-framework, an upper adjustable cross-bar, raising-bars pivotally secured thereto, a raising-wheel, and a connection therefrom to one of the raising-bars, substantially as set forth.

6. In a trestle, the combination with a rigidly-supported horizontal bar having vertical slotted posts connected therewith at each end, an upper adjustable cross-bar, pairs of raising-bars connected with said bars, embracing the horizontal bar and vertical slotted posts and provided with holes, and locking-bolts provided with clamping devices adapted to clamp the raising-bars to the vertical post at varying heights, substantially as set forth.

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

LOUIS F. SCHILLING.

Witnesses:
JAS. J. MCAFEE,
C. M. CLARKE.