(No Model.) 2 Sheets—Sheet 1.

J. O. RICHMOND.

COMBINED DESK AND EASEL.

No. 460,032. Patented Sept. 22, 1891.

Fig. 1.

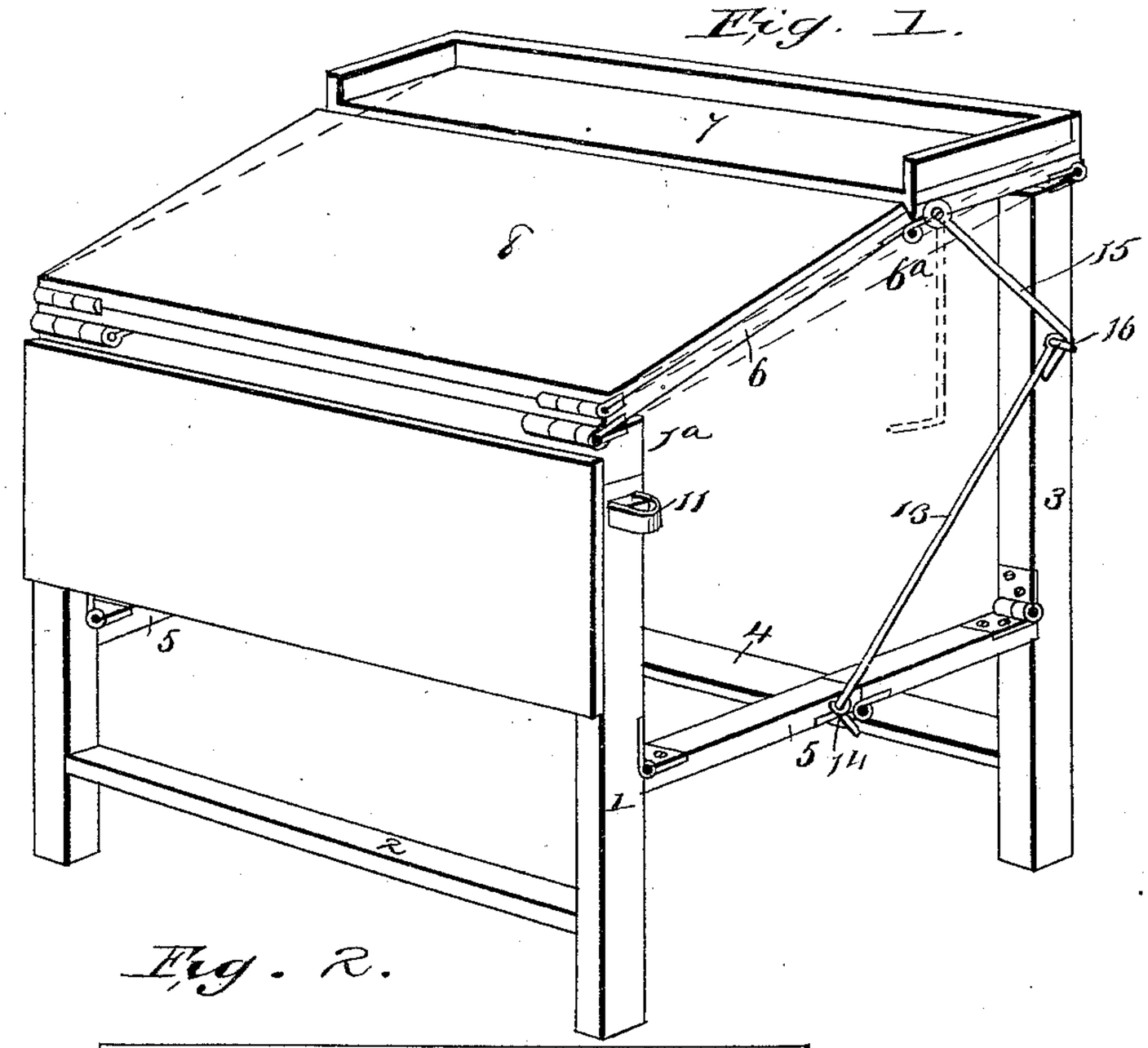
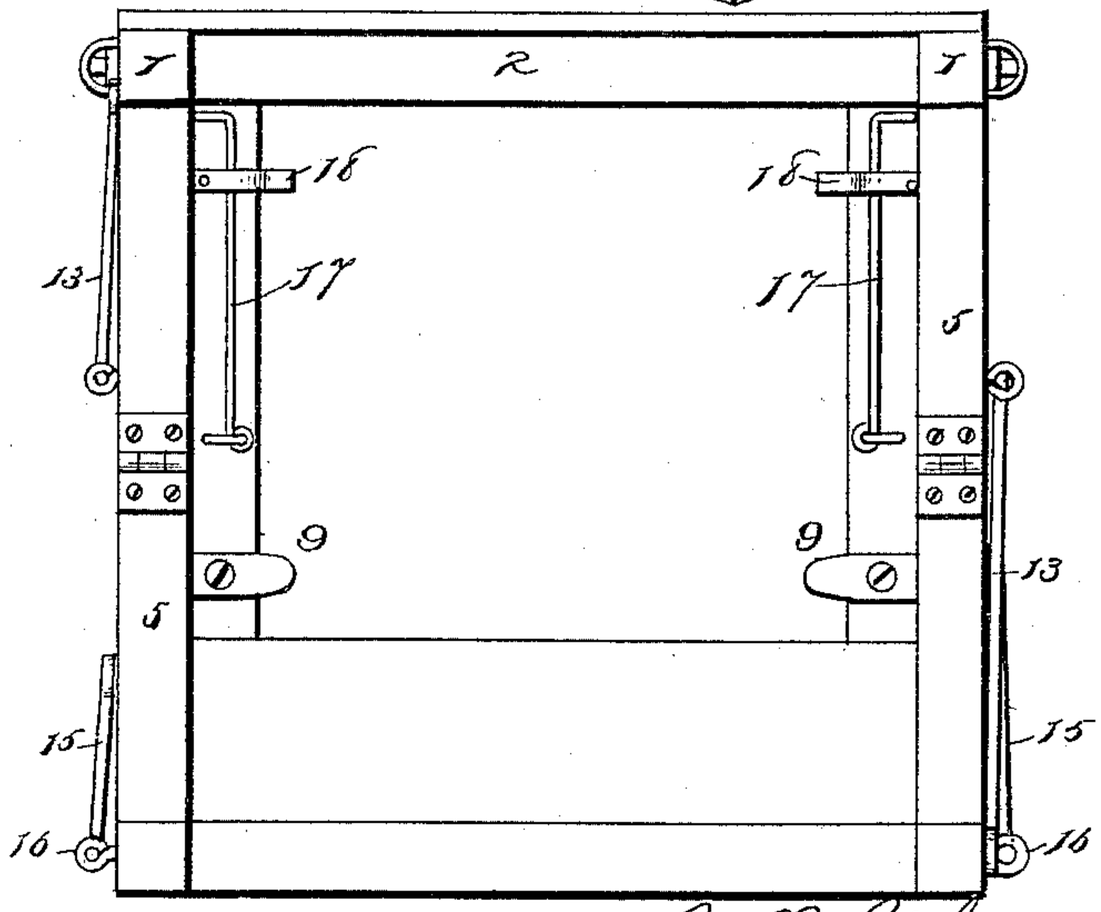


Fig. 2.



Witnesses
A. J. Schwartz
C. S. Frye.

J. O. Richmond Inventor;
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W. D. FitzGerald & Co.

(No Model.) 2 Sheets—Sheet 2.

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Fig. 3.

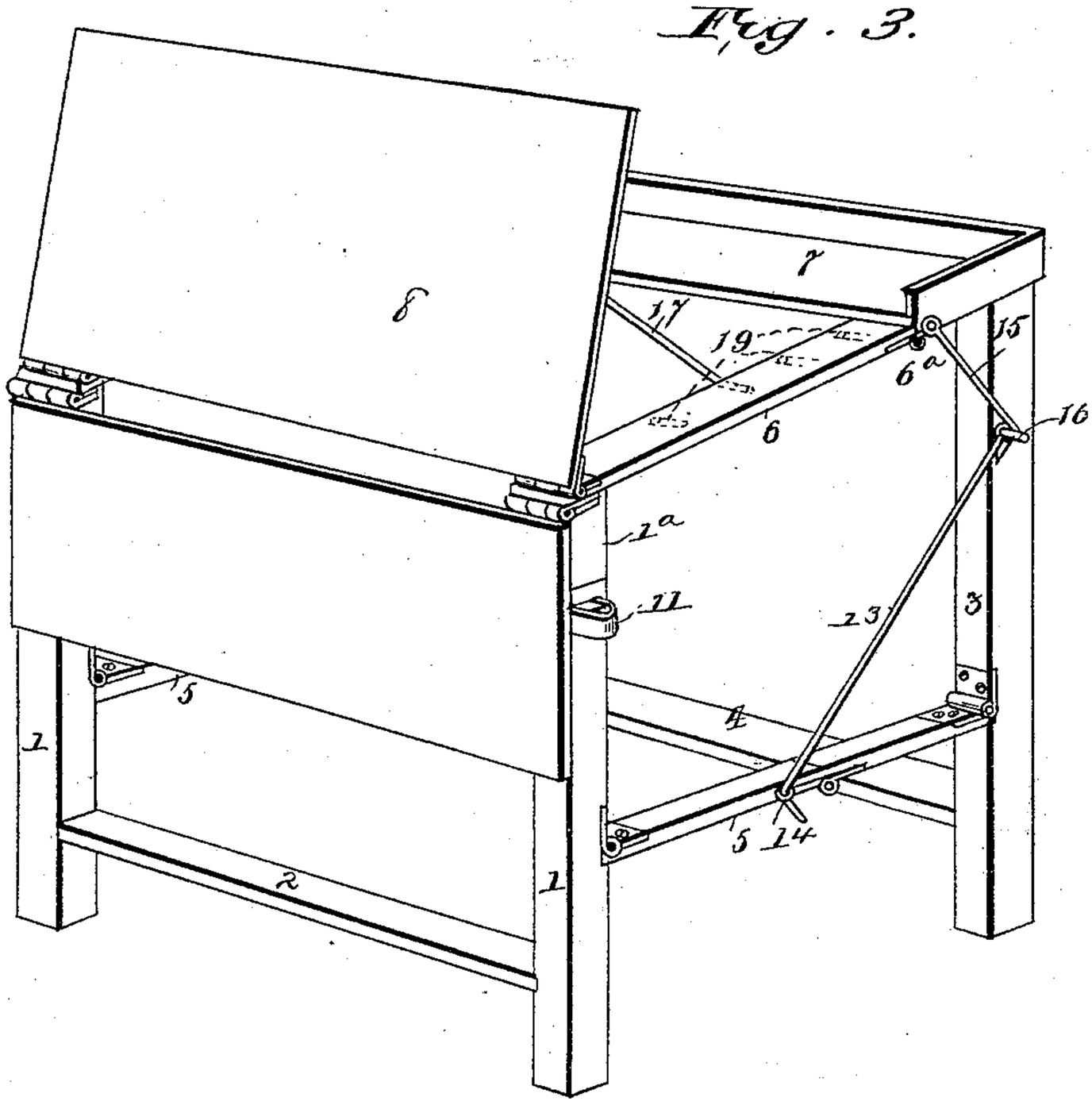
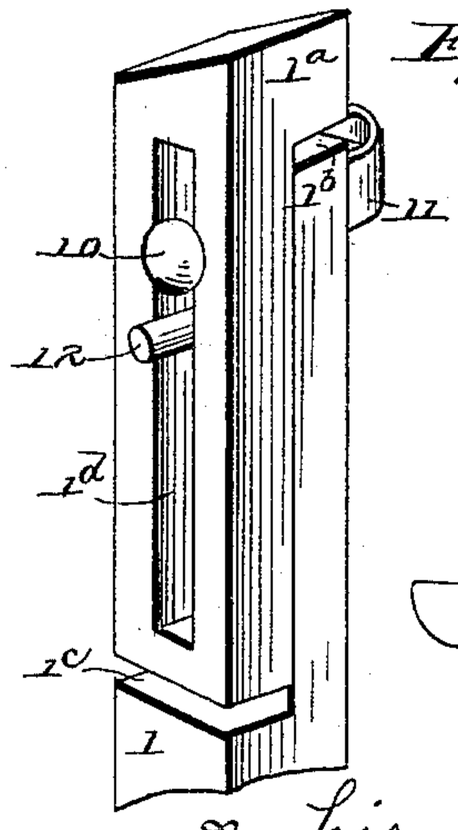


Fig. 4.



Witnesses
A. J. Schwartz
C. S. Frye.

Inventor:
J. O. Richmond
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UNITED STATES PATENT OFFICE.

JOHN O. RICHMOND, OF HART, MICHIGAN.

COMBINED DESK AND EASEL.

SPECIFICATION forming part of Letters Patent No. 460,032, dated September 22, 1891.

Application filed May 2, 1891. Serial No. 391,351. (No model.)

To all whom it may concern:

Be it known that I, JOHN O. RICHMOND, a citizen of the United States, residing at Hart, in the county of Oceana and State of Michigan, have invented certain new and useful Improvements in Combined Desks and Easels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists in a combined folding adjustable desk and easel which can be adjusted in several ways, as hereinafter described, when used as a desk, and can also be arranged to be used as a painter's easel, and when not in use the device can be folded up into a small compass for transportation or storage, and the invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a perspective view of my combined desk and easel, showing the same arranged as a desk. Fig. 2 is a bottom plan view thereof. Fig. 3 is a perspective view showing the easel raised. Fig. 4 is a detail view, on an enlarged scale, of one of the front upper corners of the desk.

Referring to the several parts by their designating-numerals, 1 1 indicate the front legs of the combined desk and easel, which are rigidly connected by the cross-pieces 2, and 3 3 indicate the rear legs, which are rigidly connected by the cross-pieces 4. The front and rear legs are connected near the center of their lengths by the connecting-bars 5, which are hinged at their ends to the front and rear legs, and are hinged at the center of their lengths, so that they can be folded up, as hereinafter described.

6 6 indicate the supporting-bars of the desk-top, the upper ends of which are hinged on the upper ends of the rear legs 3, while their lower ends are hinged on the upper ends of the adjustable sections 1^a of the front legs. These supporting-bars are formed in two sections, being hinged together at the point 6^a, as shown. Upon the shorter upper sections of the bars 6 is secured the upper section 7 of the desk-top.

To the lower ends of the supporting-bars 6 is hinged at its lower end the main section 8 of the desk-top, which also forms the adjustable easel, as hereinafter described. This easel or top section is held in its closed position by buttons 9. (Shown in Fig. 2 of the drawings.)

The upper ends of the front legs 1 are cut away on their inner sides at the point 1^b, and the lower ends of the adjustable sections 1^a are reduced or cut away on one side at the point 1^c and are formed with the longitudinal slots 1^d. Through these slots pass the clamping-screws 10, having on their outer threaded ends the thumb-nuts 11, and in the upper reduced ends of the legs 1 are secured the inwardly-projecting stop-pins 12, which extend through the longitudinal slots 1^d.

When the desk is opened out for use, the hinged connecting-bars 5 are straightened out and the hooked lower ends of bracing-rods 13 are engaged in eyes 14, secured in the sides of the bar-sections 5. One of these bracing-rods is pivotally secured to one of the rear legs 3, and the other is preferably pivotally secured to one of the front legs 1. The desk will now present a straight inclined surface, and its front end can be adjusted to give it any desired pitch or inclination by loosening the thumb-nuts 11 and raising the adjustable upper sections 1^a of the front legs 1 to the desired point, when the thumb-nuts are again tightened.

To use the desk as a drawing-table, the top is adjusted so as to present a single broad flat surface, as shown in Fig. 1. When the desk is to be used as a writing-desk, the front edge of the hinged upper sections 7 of the desk-top is raised, and the lower hooked ends of the two bracing-rods 15 (the upper ends of which are pivoted to the upper hinged sections 6^a of the supporting-bar 6) are engaged in eyes 16, secured to the rear legs 3, as shown, thus supporting the upper section 7 of the desk-top in a horizontal position, forming a shelf for supporting paper, ink, &c.

To adjust the device as a painter's easel, the turn-buttons 9 are turned to free their ends from the bars 6, and the bent free ends of bracing-rods 17, which are hinged to the under side of the easel, are freed from the securing-catches 18 (shown in Fig. 2) and en-

gaged in either of the series of apertures 19, formed in the inner side of the supporting-bar 6, by which means the easel can be raised and secured at any desired angle.

By freeing the several bracing-rods the combined desk and easel can be easily folded together so as to occupy a very small compass.

From the foregoing description, taken in connection with the accompanying drawings, the construction, methods of adjustment, and advantages of my invention will be readily understood without requiring further detailed description. The device is very simple and strong in construction, and can be readily adjusted for the several purposes for which it is designed.

I am aware that prior to my improvements there has been employed in this class of structures mechanism for the raising of a horizontal surface at the back part of the desk or table when the front part is being raised to form an inclined plane by means of the arrangement of the screw and lever or any analogous device, the front part being hinged to the elevating-frame, the same having been applied to both standing and sitting tables or desks. Furthermore, I am aware that two triangular sectional frames having uprights connected at top and bottom by horizontal bars and controlled by a windlass, ratchet, hand-crank, and detent for retaining the parts in the positions to which they may have been adjusted have been used prior to my improved structure; and, further, that a desk and table having telescoped front legs and a hinged rear support, so that the devices can be converted from a desk into a table at pleasure, and I do not broadly claim either of these constructions herein.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination of the rear supporting-legs, the front supporting-legs having the adjustable upper sections 1^a secured upon them, the hinged connecting-bars 5, the hinged supporting-bars 6, hinged at their ends on the front and rear legs, the top formed in the two sections 7 8, and the hinged bracing-rods 13 15, and the fixed eyes 14 16, with which they are adapted to engage, substantially as set forth.

2. The combination, with the rear legs and the connecting-bars 5, of the front legs 1, having the reduced ends 1^b, and the inwardly-projecting stop-pins 12, the upper adjustable sections 1^a, having the reduced lower ends 1^c, formed with the longitudinal slots 1^d, the clamping-screws 10, having the thumb-nuts 11 on their outer ends, and the desk-top hinged on the upper ends of the rear legs 3, and the adjustable sections 1^a, substantially as set forth.

3. The combination of the rear legs 3, the front legs having the upper adjustable sections, the hinged connecting-bars 5, the hinged supporting-bars 6 6^a, formed with the series of apertures 19, the hinged brace-rods 13 15, arranged as specified, and the fixed eyes 14 16, the upper top sections 7, and the lower easel-section 8, hinged at its lower end and having hinged to its under side the brace-rods 17, formed with bent lower ends, substantially as set forth.

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

JOHN O. RICHMOND.

Witnesses:

WM. P. SACKRIDER,

JAS. BRASSINGTON.