F. Ludke,

Folding Stool,

No. 46,121. Patented Jan. 31, 1865.

Fig. 1.

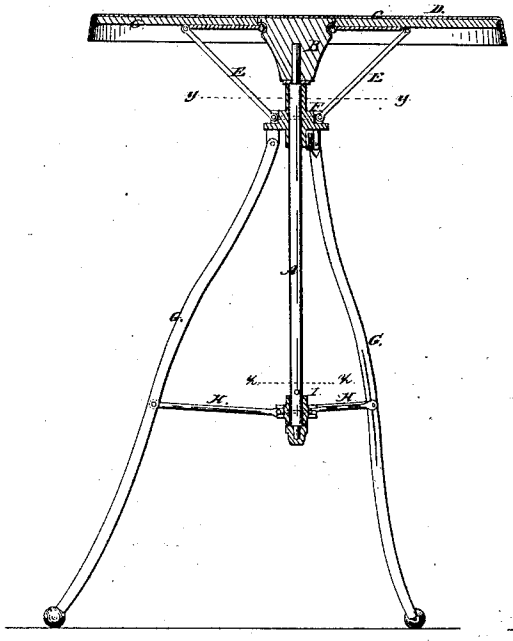


Fig 4.

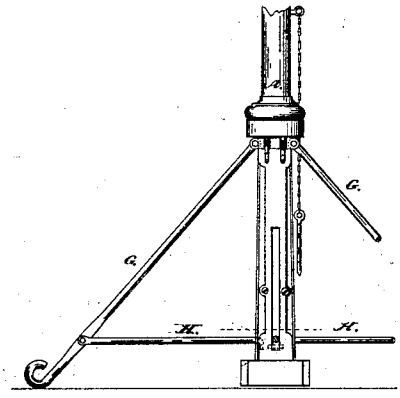


Fig. 2.

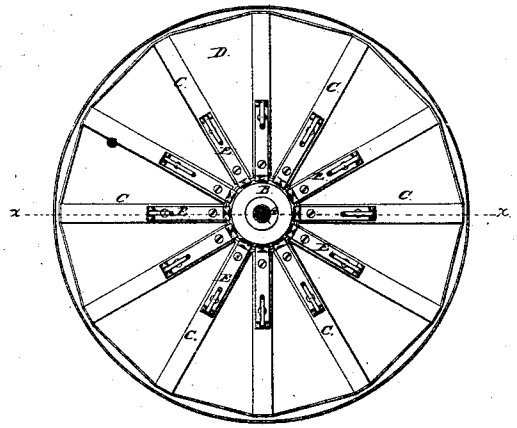


Fig. 3.

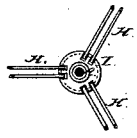
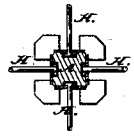


Fig. 5.



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UNITED STATES PATENT OFFICE.

FERDINAND LÜDKE, OF NEW YORK, N. Y.

IMPROVED FOLDING CHAIR OR TABLE.

Specification forming part of Letters Patent No. **46,121**, dated January 31, 1865.

To all whom it may concern:

Be it known that I, FERDINAND LÜDKE, of the city, county, and State of New York, have invented a new and useful Improvement in Folding Chairs, Tables, &c.; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a transverse vertical section of this invention, taken in the plane indicated by the line *x x*, Fig. 2. Fig. 2 is a sectional inverted plan, the line *y y*, Fig. 1, indicating the plane of section. Fig. 3 is a horizontal section of the same, the plane of section being indicated by the line *z z*, Fig. 1. Fig. 4 is a sectional side elevation, and Fig. 5 a horizontal section of a modification of the same.

Similar letters of reference indicate like parts.

This invention consists in a folding chair, table, or other similar article, the seat or top of which is made of canvas or other flexible material, and supported by a series of radiating arms, which are hinged to a central hub secured to the upper end of a longitudinally-sliding staff, in combination with hinged braces connected to the radiating-arms and made to radiate from a sleeve through which the staff slides, and which is supported by hinged legs, connecting by means of toggle-arms with a ring fitted on the lower end of the central staff in such a manner that by expanding the legs and depressing the central staff the seat or top is expanded and rendered rigid, and at the same time the toggle-arms assume such a position that they retain the legs and prevent them from collapsing accidentally; but by slightly raising the central staff the toggle-arms are brought in such a position that the the chair, table, or other article can be folded up with the greatest convenience and in a small compass. If desired, the legs and seat or top may be disconnected and each folded or expanded separately.

A represents a staff made of iron or any other suitable material. Secured to the upper end of this staff is a hub, B, of wood or any other suitable material, and provided with a series of radiating arms, C, which can be made to fold down parallel with the staff, or which may be brought in a horizontal position, as shown in the drawings. A piece, D, of canvas, leather, or other flexible material, with or without stuffing, is secured to the outer surfaces of the arms C, and when the arms are expanded this piece of canvas or other material forms the seat of a chair or the top of a table or other piece of furniture, as the case may be. Each of the arms C connects by a brace, E, with a sleeve, F, which is fitted loosely on the staff A. If the staff is pushed up or the sleeve allowed to slide down on the same, the radiating arms and braces fold up close to the staff.

The sleeve F is hinged to the upper ends of three (or more) legs, G, which support the chair, table, or other article, and which can be folded or spread as occasion may require. To prevent them from spreading any farther than desirable, or from collapsing spontaneously when the chair or other article is in use, each leg is connected by a hinged arm, H, with a ring, I, which is fitted to the staff A either firmly or loosely, but so that it is prevented from moving in a longitudinal direction.

When the staff A is depressed so as to unfold the seat or top, the arms H are brought in such a position that they form toggle-arms, which will prevent the legs being folded until their inner ends are raised above a horizontal plane passing through the pivots which connect them to the legs. By this arrangement the upward motion of the central staff causes the seat or top to fold simultaneously with the toggle-arms H, which lock the legs, and also prevent the seat or top from collapsing spontaneously. If desired, however, the legs may be hinged to the central staff, as shown in Figs. 4 and 5 of the drawings, and the toggle-arms, instead of being hinged to a ring, I, may be connected to a slide which moves up and down in slots in the lower end of the central staff. The sleeve to which the radiating-arms are connected which form or support the seat or top is not connected to the legs, and when the top is expanded it is held up by a pin passing transversely through the staff.

A chair or table can thus be produced which

is very light, which will fold up in a small compass, and which can be transported with ease and unfolded with facility.

I claim as new and desire to secure by Letters Patent—

1. The vertically-sliding staff A, with hub B and radiating arms C, in combination with a sleeve, F, braces E, hinged legs G, and toggle arms H, all constructed and operating substentially as and for the purpose set forth.

2. The combination of the radiating arms C and braces E with a piece, D, of flexible material, and with legs G, substantiallly as and for the purpose described.

3. The toggle-arms H, in combination with the folding legs G and central staff, A, applied and operating substantially as and for the purpose specified.

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