(No Model.) 2 Sheets—Sheet 1.

E. N. GILFILLAN & W. W. KRUTSCH.

REVERSIBLE CHAIR AND TABLE.

No. 342,002. Patented May 18, 1886.

Fig. 1.

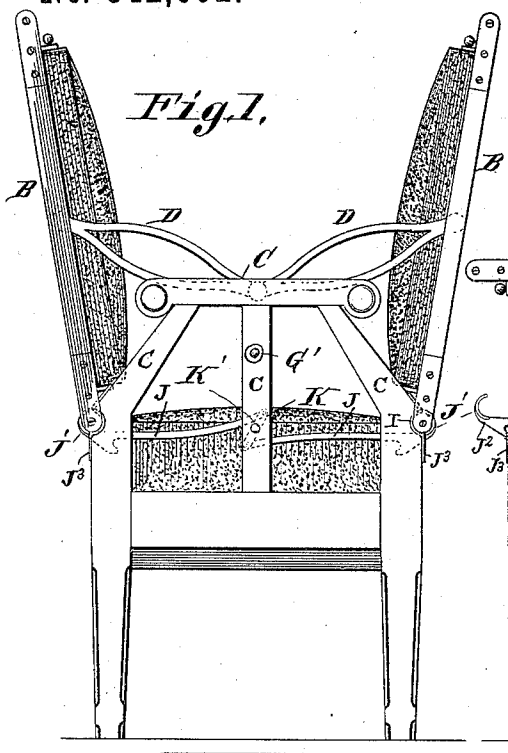


Fig. 2.

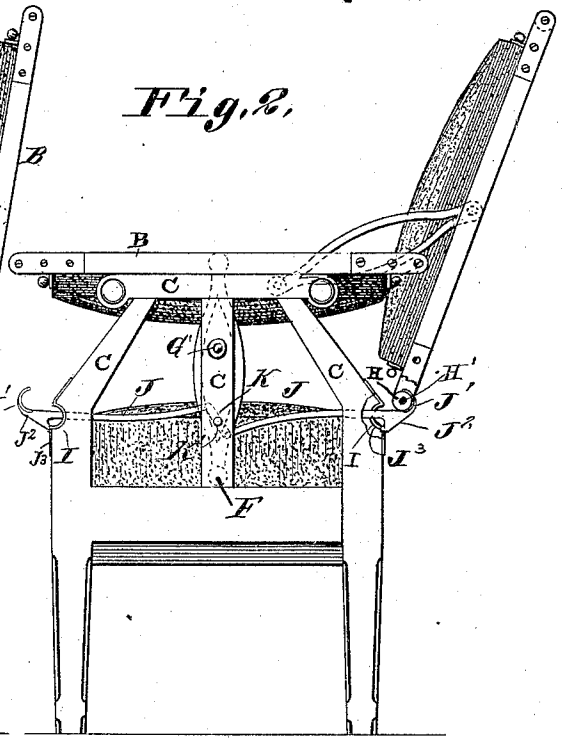
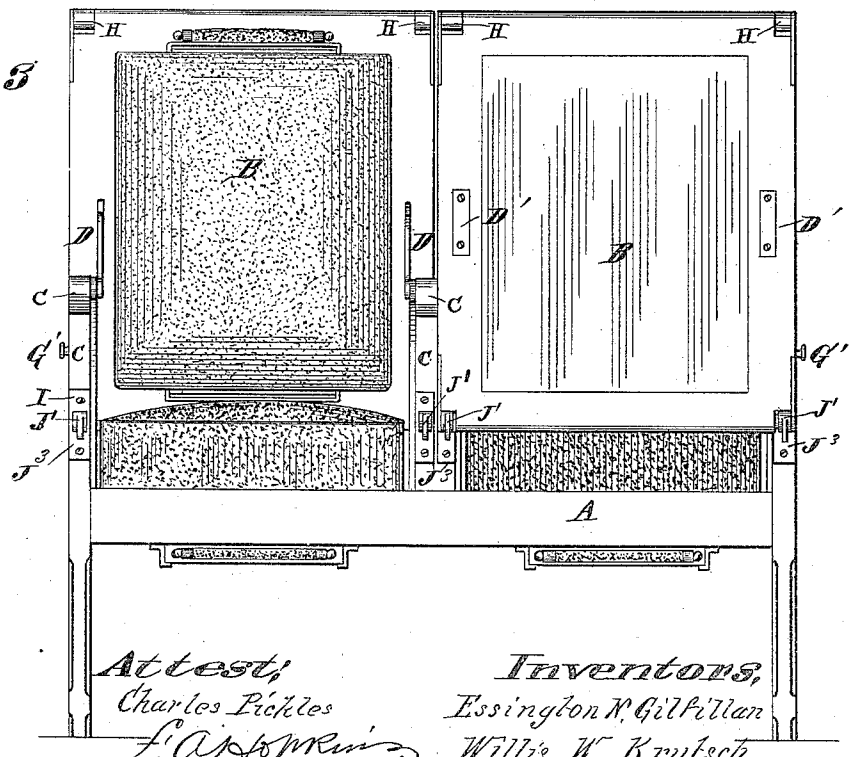


Fig. 3



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

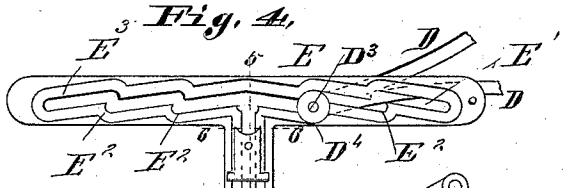

Fig. 5.

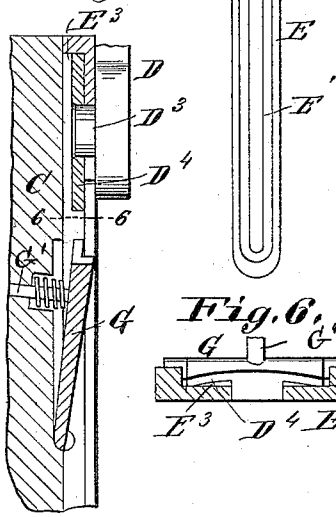

Fig. 6.

Fig. 7.

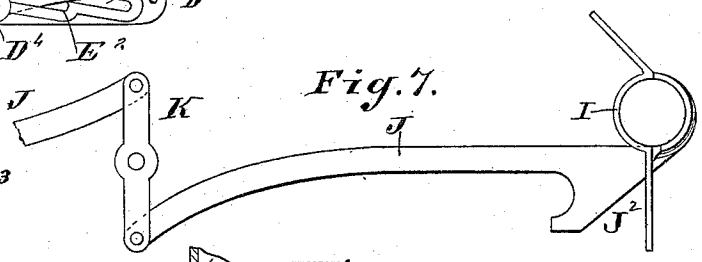

Fig. 8.

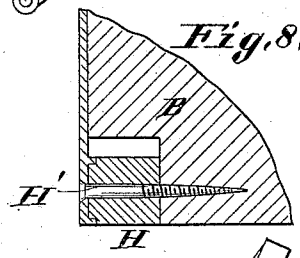

Fig. 9.

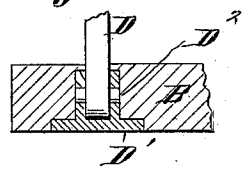

Fig. 10.

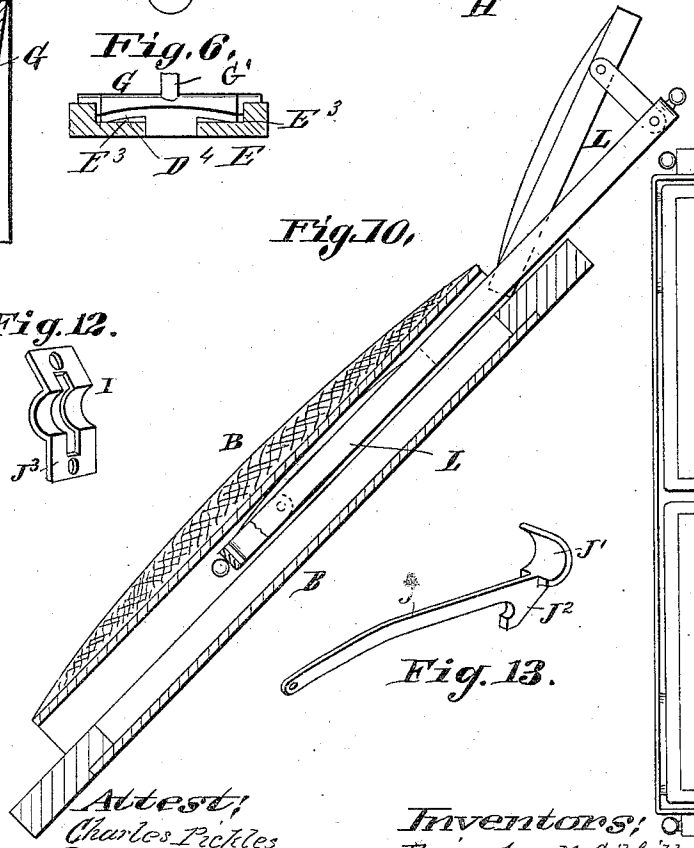

Fig. 11.

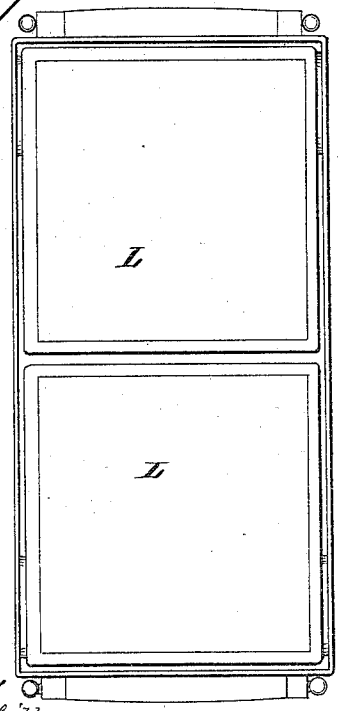

Fig. 12.

Fig. 13.

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UNITED STATES PATENT OFFICE.

ESSINGTON N. GILFILLAN AND WILLIS W. KRUTSCH, OF FORT SCOTT, KANS.

REVERSIBLE CHAIR AND TABLE.

SPECIFICATION forming part of Letters Patent No. 342,002, dated May 18, 1886.

Application filed January 18, 1886. Serial No. 188,947. (No model.)

To all whom it may concern:

Be it known that we, ESSINGTON N. GILFILLAN and WILLIS W. KRUTSCH, of Fort Scott, in the county of Bourbon and State of Kansas, have invented a certain new and useful Improvement in Reversible Chairs and Tables, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a side view of a double chair, or two chairs placed side by side, embodying our invention. Fig. 2 is a similar view with the back of one of the chairs placed in position for a table. Fig. 3 is a front elevation of that shown in Fig. 1. Fig. 4 is an enlarged view of the triangular ratchet-bar. Fig. 5 is an enlarged vertical section taken on line 5 5, Fig. 4, including a portion of the arm-rest. Fig. 6 is an enlarged horizontal section taken on line 6 6, Figs. 4 and 5. Fig. 7 is an enlarged view of one of the pawls or dogs. Fig. 8 is an enlarged detail view of one of the lower corners of one of the backs. Fig. 9 is an enlarged detail view illustrating the manner of connecting the arms to the backs. Fig. 10 is an enlarged vertical section through one of the backs. Fig. 11 is a view of the sliding head-rest removed. Fig. 12 is a perspective view of the bearing plate or socket. Fig. 13 is a perspective view of one of the pawls or dogs.

Our invention relates to an improved form of chair, intended more particularly for use in railway-cars, the back of which is made reversible, and may be placed in a position to be used as a table; and our invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Referring to the drawings, A represents a chair made double, two chairs being secured together, if desired, as shown. Each chair has a back, B, connected to the arm-rests C by arms D. The outer ends of the arms are connected to the backs, as shown in Fig. 9, by means of brackets D′, fitting into the backs and perforated to receive a pin, D^2, that passes through a similar hole or perforation in the arm. On the inner end of each arm is a pin, D^3, working in a triangular slot, E′, of a triangular plate, E, secured to the arm-rest. The horizontal part of this slot E′ is made in zig-zag shape, as shown in Fig. 4, forming shoulders or stops E^2, against which the pin D^3 of the arm comes, to hold the back to any adjustment. On the outer end of the pin D^3 is a washer, D^4, which fits in the horizontal portion of a triangular recess, E^3, of the triangular plate. The vertical portion of the slots E′ and recesses E^3 extend down the vertical parts of the plates E, as shown, so that the back may be placed in the position shown in Fig. 2, to form a table, each pin D^3 passing down a vertical part to the position shown at F, Fig. 2. To prevent the pins passing down these slots when it is not desired to use the back as a table, and while the back is being reversed, we secure a spring-block, G, to the arm-rest C, as shown in Fig. 5. The normal position of these spring-blocks is that which is shown in Fig. 5, where they project over the vertical portion of the slot E′ and recesses E^3 of the plate E, so as to prevent the pins D^3 passing down the slots, as the disks D^4 come against the upper end of the spring-blocks, and when it is desired to place the back in position to be used as a table these blocks are pulled back by means of pins or buttons G′, to permit the passage of the pins.

The ends of the backs are provided at each corner with bearings H, held to the backs by screws H′, as shown in Figs. 3 and 8. These bearings fit in sockets formed partly in the body of the chair, as shown at I, Figs. 2, 3, and 12, and partly by hooks J′ on the outer ends of the pawls or bars J, as shown in Figs. 1, 2, 3, 7, and 13, connected at their inner ends to a plate, K, pivoted to the body of the chair, as shown at K′. When one of the backs is to be reversed, upward and forward pressure on its upper end will cause these bars or pawls to be moved from the position shown in Fig. 1 to that shown in Fig. 2, the movement of the bars being upward and outward, and the further movement of the back removes the bearings H from the hooks J′, and then, as the back reaches its downward movement on the other side of the chair, similar bearings to those, H, on its upper end will enter the hooks J′ on the other bars J, and as the back enters the hooks the pressure thus brought upon the bar causes its inclined face J^2 to travel down-

ward on the plate J^3, and the bars are thus brought again into their inner position, as shown in Fig. 1.

The back of the chairs may be provided with a sliding head-rest, L, if desired.

We claim as our invention—

1. The combination, with a chair having arm-rests, a back, and arms pivoted to the back and to the arm-rests, of the sockets on the chair and pawls having hooks for holding the lower ends of the backs in the sockets, hinged to plates pivoted to the chair-body, substantially as set forth.

2. The combination, with a chair having arm-rests, a back, and arms pivoted to the back and to the arm-rests, of the socket-plates for the lower end of the back, secured to the chair, and pawls formed with hooks and inclined faces, hinged to pivoted plates on the chair-body, substantially as set forth.

3. The combination, with a chair having arm-rests, a back, and arms pivoted to the back and to the arm-rests, of sliding pawls having hooks supporting the back, substantially as set forth.

4. The combination, with a chair having arm-rests, a back, and arms pivoted to the back and to the arm-rests, of the plates secured to the arm-rests, formed with vertical slots permitting the inner pivots of the arms to pass down and the arms to assume a vertical position, while the back is supported on the arm-rests to form a table, substantially as set forth.

5. The combination, with a chair having arm-rests, a back, and arms pivoted to the back and to the arm-rests, of the plates formed with vertical slots, secured to the arm-rests, and blocks for supporting the inner pivots of the arms, substantially as set forth.

6. The combination, with a chair having arm-rests and arms pivoted thereto, of a back hinged to the arms, having bearings H, secured to the corners, and the shifting pawls having hooks supporting the back by said bearings, substantially as set forth.

7. The combination, with a chair having arm-rests, a back, and arms, of the triangular plates E, having a triangular slot, E′, formed with zigzag horizontal portion having catches E^2, and vertical portions receiving the inner pivots of the arms, and hinged blocks G, closing the vertical portions of the slots, substantially as set forth.

8. A plate, E, having a triangular slot, E′, surrounded by a triangular recess, E^3, in combination with a chair having a back hinged thereto by an arm provided with a pin, D^3, and washer D^4, substantially as set forth.

9. A double chair provided with arm-rests formed with triangular slots, and backs having arms provided with pins working in the slots, the backs being independently reversible and adapted to rest on the arm-rests and form tables, substantially as set forth.

10. A double chair, or two chairs side by side, having sockets or bearing-plates I, pawls J, and backs B, hinged to the chair-bodies, provided with bearings H, substantially as set forth.

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WILLIS W. KRUTSCH.

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BENJAMIN A. KNIGHT.
Witnesses to signature of W. W. Krutsch:
D. S. MCKAY,
C. R. HEMENWAY.