J. C. NICHOL.

FOLDING LEG FURNITURE.

APPLICATION FILED JULY 5, 1918.

1,298,249. Patented Mar. 25, 1919.

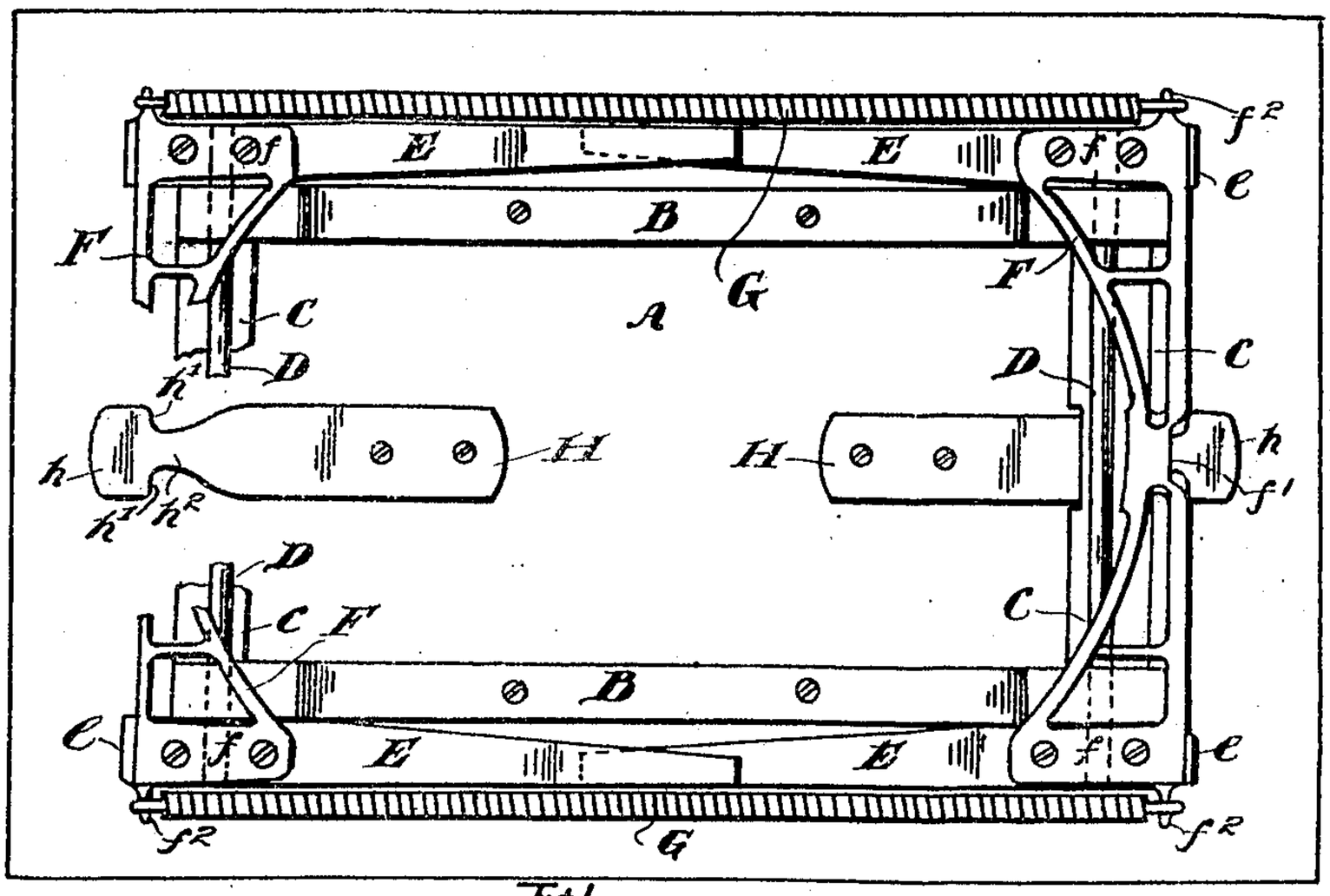

Fig. 1.

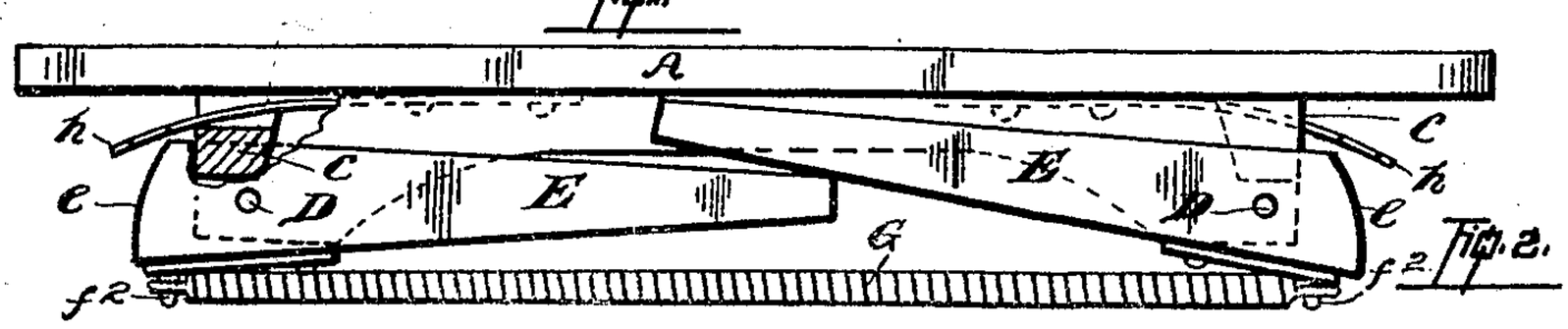

Fig. 2.

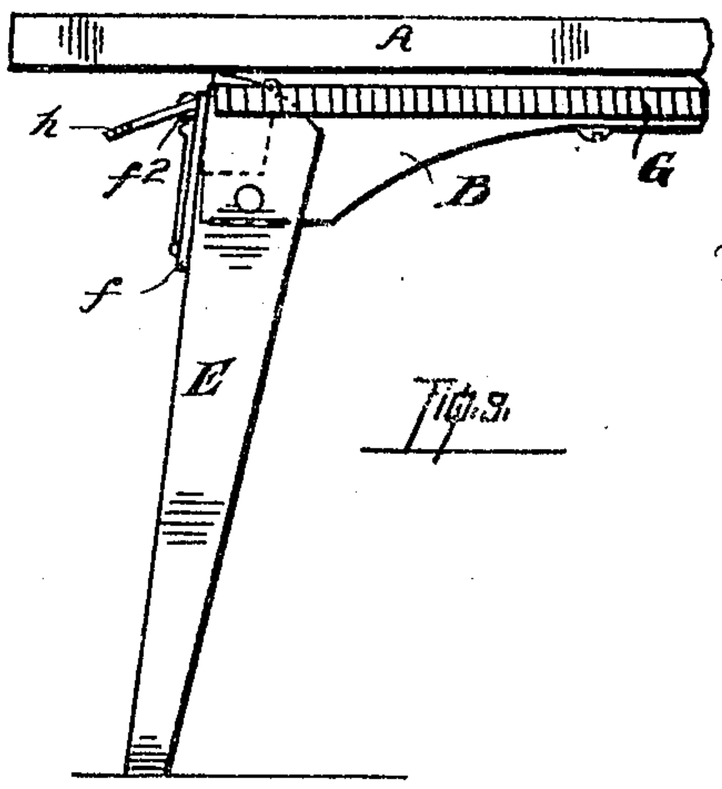

Fig. 3.

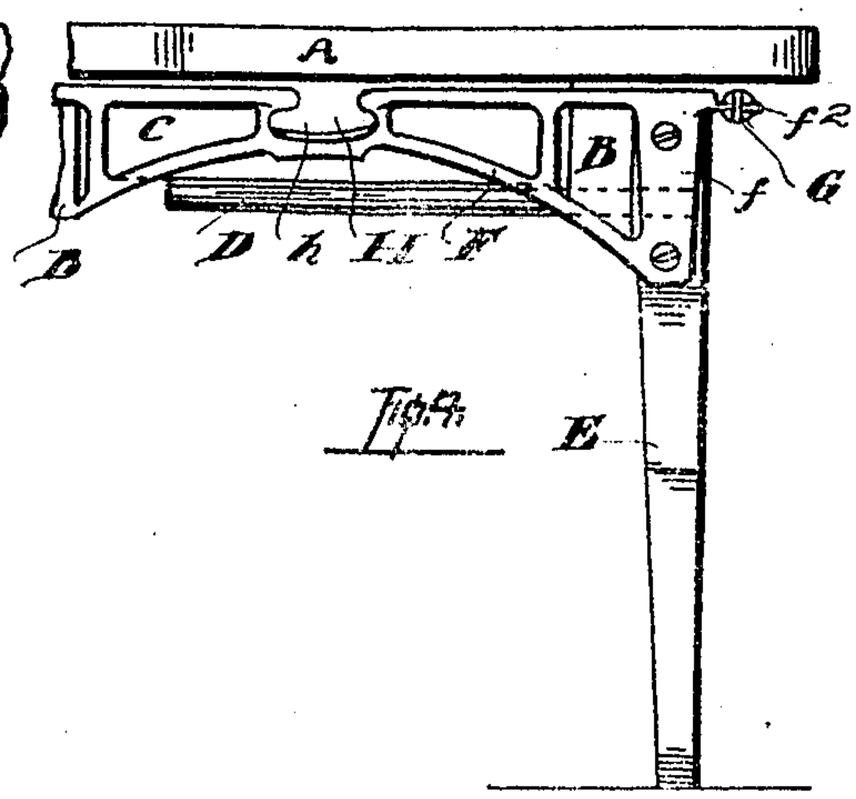

Fig. 4.

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FOLDING-LEG FURNITURE.

1,298,249. Specification of Letters Patent. Patented Mar. 25, 1919.

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To all whom it may concern:

Be it known that I, JOHN CHRISTOPHER NICHOL, a subject of the King of Great Britain, residing at the town of Perth, in the county of Lanark, in the Province of Ontario, Canada, have invented new and useful Folding-Leg Furniture, of which the following is a specification.

The invention, which will be hereinafter fully set forth and claimed, relates to tables, chairs, beds and other furniture having legs and particularly to the manner in which such legs and their attachments may be constructed and appplied, so that the legs may be folded for transportation and other purposes and held securely in place when so folded or when the furniture is set up for use.

Figure 1 is a plan of the underside of the table, showing the legs folded and parts broken out, showing construction.

Fig. 2 is a side-view of the same; part broken out.

Fig. 3 is a partial side-view of the same, showing the legs set up and the table ready for use, and

Fig. 4 is a partial end view of the same.

My invention is shown as applied to table only; it will be readily understood, however, that it may be applied to chairs, cots, and the like in the same manner.

To the underside of the table top, A, serving as base, is secured a rectangular frame consisting of two longitudinal rails, B, B, connected at each end by a cross bar, C. This frame may be secured to the top by screws or in any other manner desired. The rails, B, are of considerable depth at the ends, as seen in Fig. 3, and reduced in the central portion, but this is not essential, as they may be of uniform depth if desired, but depth is required near the ends. Transverse rods, D, D, are passed through these rails near their ends at some distance from the top D; the ends of these rods project beyond the outside of the rails B and form pivots for the legs, E, or the rod may turn with the legs like a shaft.

At the pivot ends, the legs bear on the side of the rails B and are tapered off on the inner side, as clearly seen in Fig. 1. Their upper ends extend upward beyond the pivot close to the underside of the top A and the ends are rounded in the direction of their swing, as shown at *e*, Fig. 2, so as to swing clear. In the present illustration the lower ends of the legs will be seen to overlap, a circumstance that would not exist in a longer table. The taper, also, is a matter of taste, as is the inclination, as seen in Fig. 3. Each pair of legs on the same pivot is connected near the top by a transverse metallic frame, F, (Figs. 1 and 4, but also visible in the other figures) which acts as a connecting brace, firmly connecting the legs to compel the pair to move in unison and serves as a part of a lock. The ends, *f*, of this brace are made wide and are secured to the face of the legs (screws being shown in the drawing) and the central part is narrower and is formed with a recess, f^1, (Fig. 1) in the upper edge. A lug, f^2, projects laterally outward near the top edge at each end of the brace and on these lugs are hooked and secured two tension springs, G, G, one on each side, thus linking the two frames together and drawing the upper ends of the legs toward one another longitudinally.

A plate spring, H, is secured to the underside of the top A about the center line and near each end, as shown in Fig. 1 and visible in the other figures. Each of these springs has its free end, *h*, projecting beyond the cross bar C and passing through a check on the latter, bent downward and made to exert a downward pressure. (The checked cross bar C is shown at the left hand of Fig. 2 in cross section). The end *h* is made long enough to form a suitable finger piece and is notched laterally to form a pair of shoulders, h^1, h^1, (Fig. 1) and a neck h^2. The latter is adapted to pass through the recess f^1 in the frame F and the shoulders h^1 engage the front face of the frame when the legs are set up and prevent the legs from folding involuntarily. Thus the legs can only be folded when the spring is pressed upward toward the top A, disengaging it from the frame F. The inner face of the latter abuts on the bar C and prevents the legs from spreading longitudinally.

The device works simply. If the legs are set up, as in Figs. 3 and 4, and it is desired to fold them, the spring H is pressed upward toward the top, thus liberating the frame F and with it the legs E which may be swung inward into the position shown in Figs. 1 and 2 and the springs G hold them firmly in that position. For setting up the legs, they are simply swung outward, at

first against the pressure of the springs G and then with their assistance, the spring H engaging the frame F automatically at the end of the swing and thus locking the legs in their position.

While I have shown and described the preferred embodiment of my invention it will be understood that minor changes in construction, combination and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed.

I claim as my invention:—

1. In folding-leg furniture, the combination with a top as a base, of a rectangular frame secured to it, a transverse pivot rod at each end passing through the sides of said frame near the ends and some distance from the top, a pair of legs at each end mounted upon the projecting ends of said rod and having their upper ends extending beyond the pivot and close to the top and said ends rounded to clear said top, a transverse connecting piece bracing the upper parts of each pair of legs, said connecting piece formed with a recess in the upper edge and having laterally projecting lugs near th top, a tension-spring on each side secured upon said lugs and linking the two end frames together, and a notch plate-spring near each end secured to the top and having a neck and shoulders engaging the recess in the connecting brace and forming a lock to hold the legs in position, substantially as set forth.

2. In folding-leg furniture, the combination with a base, such as a table top, of side rails secured to the underside of said base, transverse rods passing through said rails near their ends and some distance from the base, legs mounted upon the projecting ends of said rods having their ends extended beyond the pivot center and rounded to swing clear of the base, a brace connecting the upper ends of each pair of legs, said brace formed with a recess in the top edge and with laterally projecting lugs, tension springs secured to the lugs of opposite pairs and a plate spring secured to the base and having neck and shoulders engaging the connecting braces and forming a lock to keep the legs in position, substantially as set forth.

In testimony whereof I have affixed my signature, in the presence of two subscribing witnesses .

JOHN CHRISTOPHER NICHOL.

Witnesses:
MAE DAROW,
SAMUEL THORNBURY.