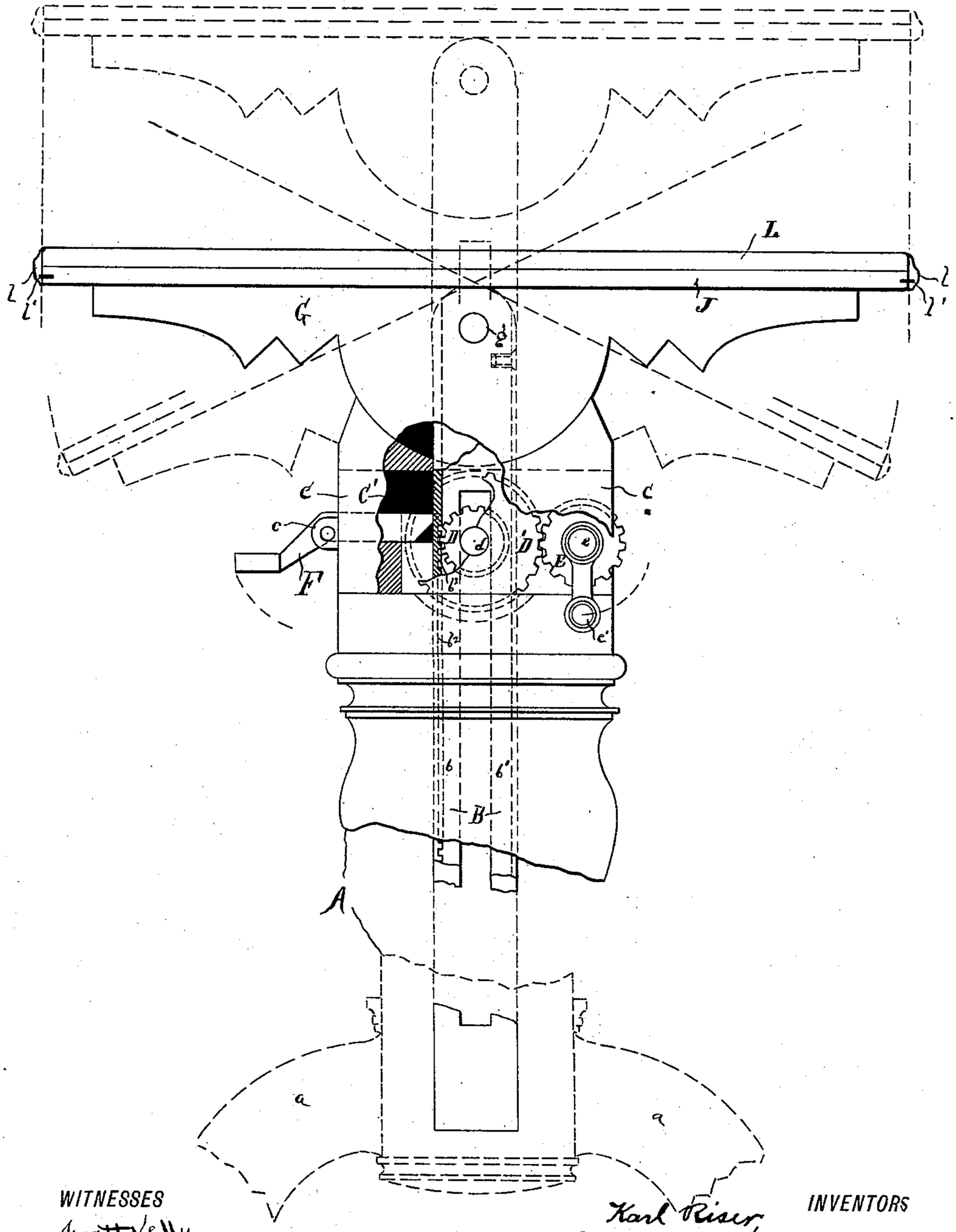
(No Model.) 3 Sheets—Sheet 1.

K. RISER & P. BARDONNER.

COMBINATION TABLE.

No. 376,415. Patented Jan. 10, 1888.

Fig 1



WITNESSES

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(No Model.) 3 Sheets—Sheet 2.

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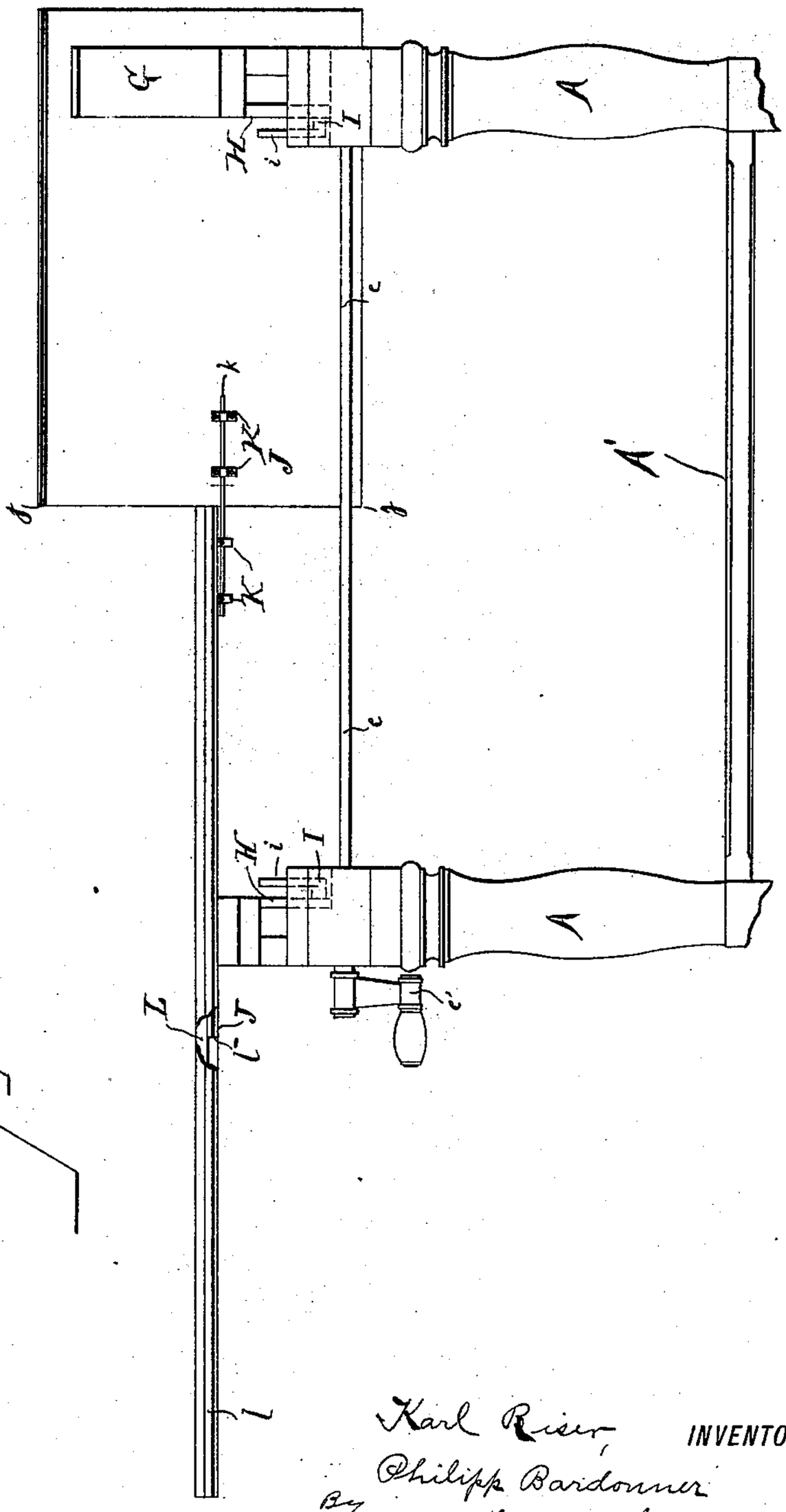

Fig. 2.

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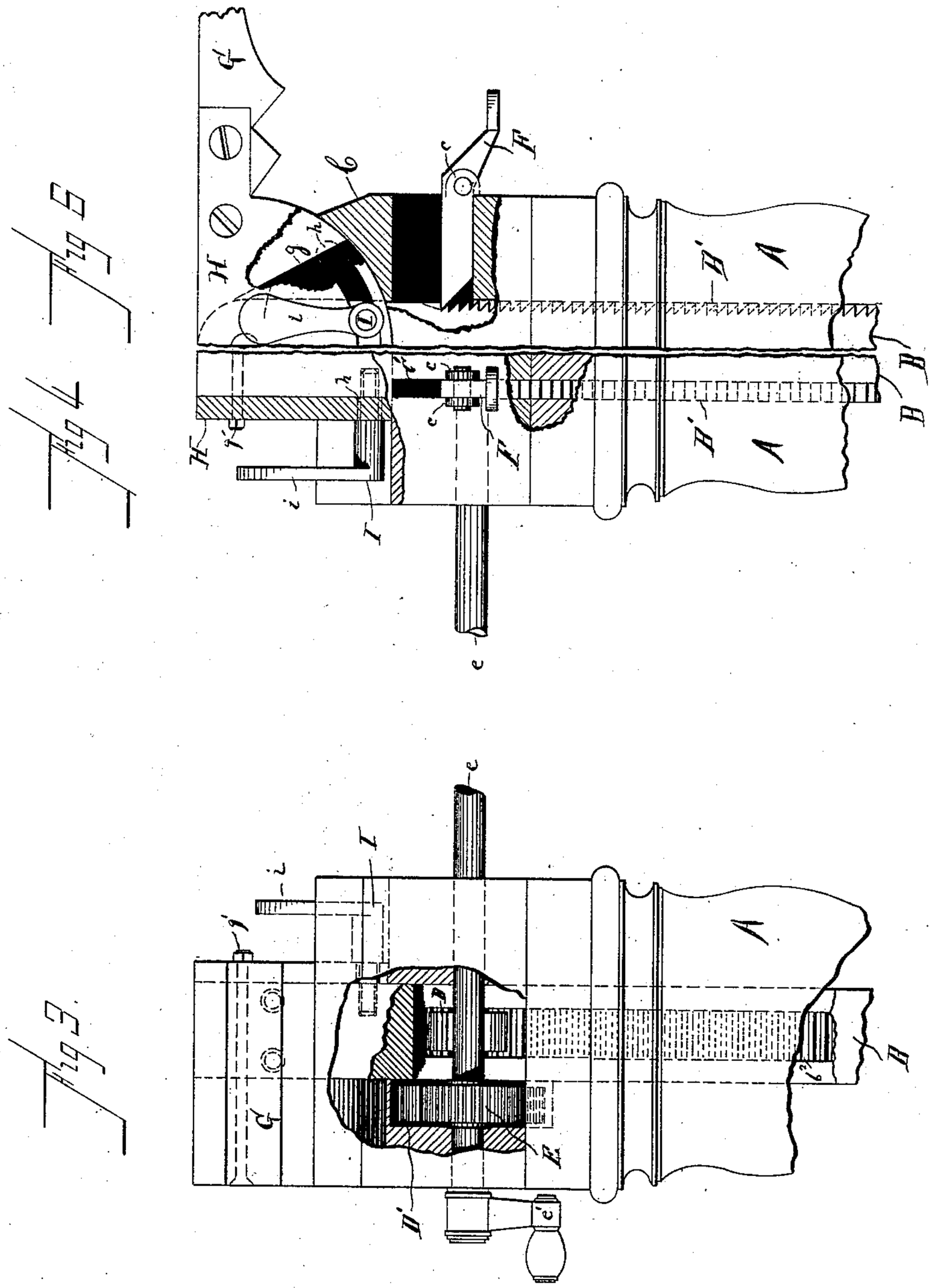

Fig. 1.

Fig. 2.

Fig. 3.

WITNESSES

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UNITED STATES PATENT OFFICE.

KARL RISER AND PHILIPP BARDONNER, OF CLEVELAND, OHIO; SAID RISER ASSIGNOR TO SAID BARDONNER.

COMBINATION-TABLE.

SPECIFICATION forming part of Letters Patent No. 376,415, dated January 10, 1888.

Application filed May 20, 1887. Serial No. 238,860. (No model.)

To all whom it may concern:

Be it known that we, KARL RISER and PHILIPP BARDONNER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Combination-Tables; and we 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 pertains to make and use the same.

Our invention relates to combination-tables in which suitable mechanism is employed for elevating, depressing, and extending the table-top, and for tilting the table-top either as a whole or in section, the object being to provide a combination-table convenient for various purposes.

With this object in view our invention consists in certain features of construction and in combination of parts, hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is an end elevation, parts thereof being broken away to show the construction and to reduce the size of the drawings. Fig. 2 is a reduced side elevation showing the table top extended and with the one section of the under leaf tilted or inclined, the legs and lower portion of the standard being omitted in this drawing. Figs. 3 and 4 are elevations, partly in section, showing reverse sides of portions of the standards and mechanism in detail. Fig. 5 is an elevation, partly in section, taken at right angles to the view shown in Fig. 4.

The supporting-frame for the table consists of standards A, legs *a*, and cross-bars A′. The standards are chambered lengthwise to receive, respectively, the rack-bars B, to which latter are pivoted the lateral arms G, that support the table-top. The rack-bars are more conveniently made in two longitudinal sections, *b* and *b′*, and fastened together with screws or bolts at the top and bottom ends of the rack-bars. These two sections are blocked apart at the end far enough to admit a pinion, D, the teeth of which engage teeth b^2 on the inner face of section *b* of the rack-bar. The outside of the rack-bar, as a whole, presents substantially a smooth surface, except that sunken ratchet-teeth B′ are had along one edge of the bar for engaging the retaining-pawl F, for holding the device at the desired elevation. A hollow metal cap or head, C, is fitted to the top of each standard, each cap having ears *c*, to which the respective pawls F are pivoted, and each cap having a slot, C′, through which these pawls extend, and each having an opening on top through which the respective rack-bars protrude. These caps are pierced laterally for receiving and forming journal-bearings for the spindles *d* and *e*. The spindles *d* have mounted thereon the pinions D aforesaid, for engaging the rack-bars, and have also mounted thereon larger gears, D′, the latter engaging pinions E, mounted at the respective ends of the spindles *e*. The latter spindle extends from standard to standard, and at one extremity has a small hand-crank, *e′*, attached, by turning which in the one direction or the other, and by means of the gearing connected as aforesaid, the rack-bars may be elevated or depressed and always made to move in unison. The lateral arms or cross-bars G are notched onto the head of the respective rack-bars, the shoulders *g* being cut back far enough to allow the cross-bars to tilt a limited direction on the pivotal bolt *g′*.

The plate H is secured to the notched side of each arm G, and the pivotal bolt *g′* passes through this plate and through the arm and through the head of the rack-bar. The plate H has a groove, *h*, made concentric with the pin or bolt *g′*, in which groove operates the stud or set-screw I, the threaded ends of the screw engaging a threaded hole in the rack-bar. This screw has a thumb-piece or handle, *i*, for operating the same, and by tightening this screw the plate H and rack-bar are held in firm contact, by means of which the arms G and table-top are held in the desired position, horizontal or inclined, as the case may be. The table-top consists of upper and lower sections, the latter consisting of a leaf, J, that is rigidly secured to the arms G. Boxes K are secured to the under side of this leaf, in which boxes is journaled a rod, *k*, that is arranged in line with the bolt *g′*. After these boxes and the rod *k* are in position the leaf J is severed on the line *j j*.

With this arrangement of parts the two sec-

tions of the leaf J may be turned independent of each other, and by means of the screws I either section of the leaf may be held in the position to which it has been adjusted.

L is the upper leaf or table-top proper, and is mounted on top of the leaf J. This top has molding *l* along the edges thereof that is made to embrace the edges of the leaf J. Each molding has a tongue, *l'*, that operates in a corresponding groove made on the respective edges of the leaf J. When the two parts of the leaf J register, the table-top may extend over both sections of the teeth, in which case the entire table-top must move together. By sliding the top L endwise past the joint of the leaf J the one section of the leaf J bearing the top L may be adjusted to an inclined or horizontal position independent of the other section of the leaf J. For instance, the one part may be adjusted on an incline convenient for writing, while the other part is left horizontal for holding an inkstand, books, papers, &c.

The table-top may be adjusted at the proper elevation to accommodate an invalid lying on a lounge or in bed, and the top L may be extended over such bed or lounge, and may be tilted in position for writing, leaving the other section of the leaf J horizontal; or the top L, when extended, may be arranged in a horizontal position for serving food for the invalid or for placing medicine or other articles thereon.

The device is not expensive to make and will be found very useful for many purposes.

What we claim is—

1. The combination, with a table-leaf made in two parts, each part adapted to tilt independently of the other, of a sliding top adapted to cover and engage both parts of the leaf, substantially as set forth.

2. The combination, with a slotted rack-bar having internal teeth, of pinions made to operate in the slots of the respective rack-bars made to engage the teeth of the latter, substantially as set forth.

3. The combination, with slotted rack-bars with internal teeth, and pinions made to operate in the slots thereof and engage the said internal teeth, of a spindle made to extend from one standard to the other, said spindle having gearing connected to the respective ends thereof for actuating the gearing to move the rack-bars, substantially as indicated, whereby the rack-bars are moved in unison.

4. The combination, with a tilting table-top made in two sections, the top section being adjustable endwise on the lower section, said lower section being divided laterally, the two parts thereof pivoted together, of rack-bars pivotally connected with the table-top, and mechanism, substantially as described, for elevating and depressing such rack bars, substantially as set forth.

In testimony whereof we sign this specification, in the presence of two witnesses, this 6th day of May, 1887.

KARL RISER.
PHILIPP BARDONNER.

Witnesses:
CHAS. H. DORER,
ALBERT E. LYNCH.