

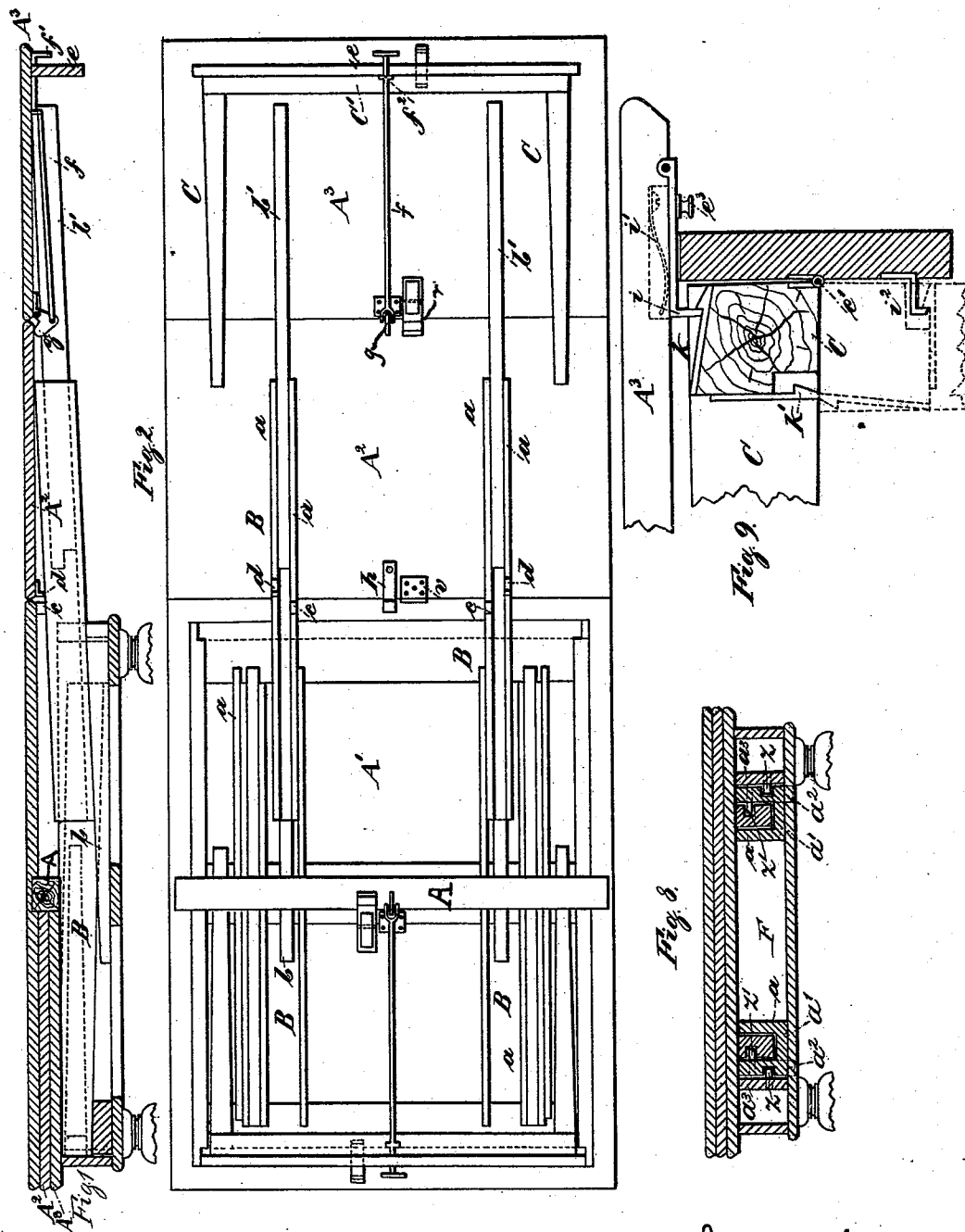
(No Model.)

2 Sheets—Sheet 1.

C. OBERLÄNDER.
EXTENSION TABLE.

No. 469,214.

Patented Feb. 16, 1892.



Witnesses.
W. Harvey Muzzy
J. M. Copenhaver

Inventor
Carl Oberländer
by
W. H. Babcock
Attorney

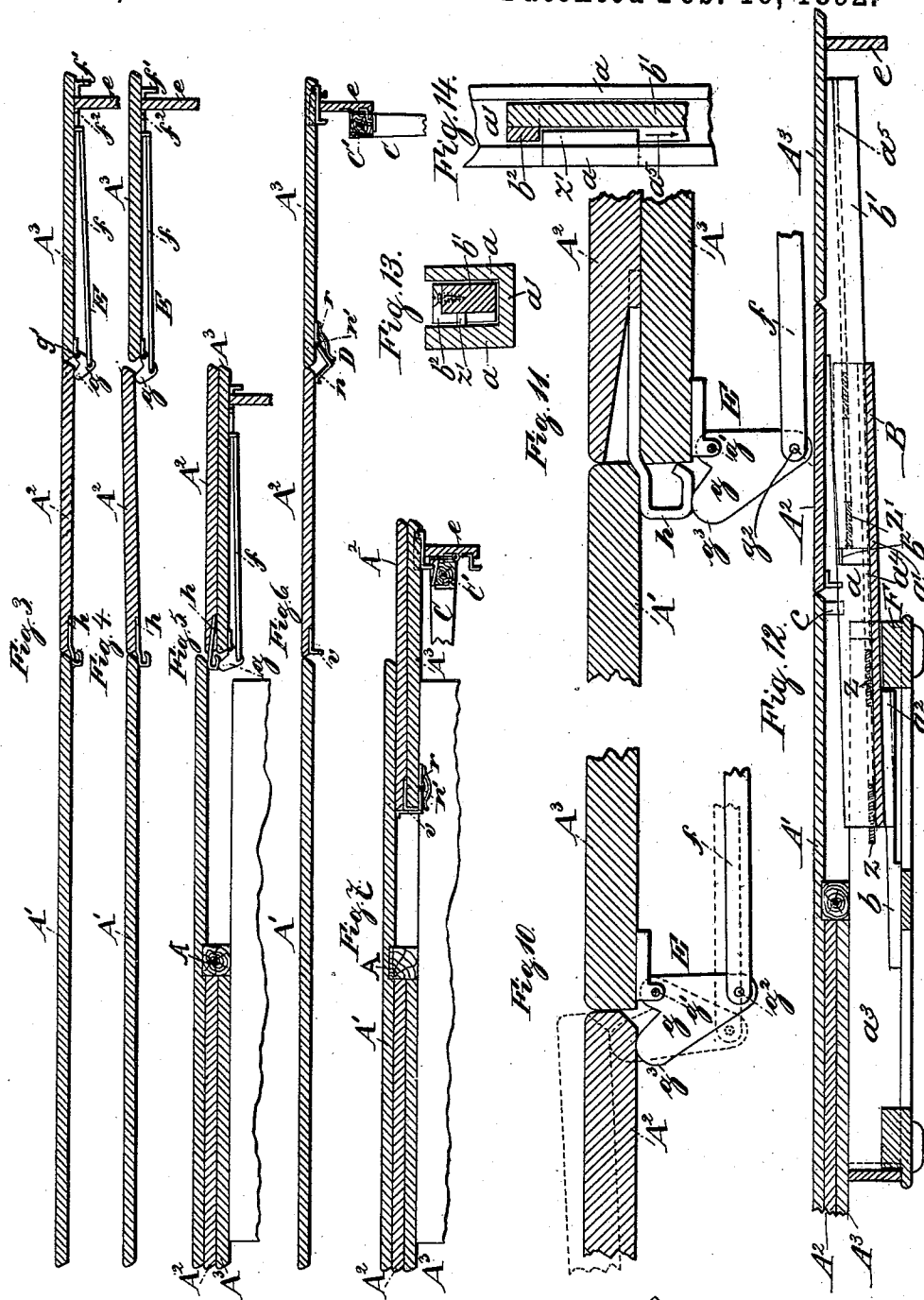
(No Model.)

2 Sheets—Sheet 2.

C. OBERLÄNDER.
EXTENSION TABLE.

No. 469,214.

Patented Feb. 16, 1892.



Witnesses.
W. Harvey Muzzy.
G. M. Copenhagen.

Inventor
Carl Oberländer
by
W H Babcock
Attorney

UNITED STATES PATENT OFFICE.

CARL OBERLÄNDER, OF STETTIN, ASSIGNOR TO RICHARD SAALFIELD, OF
BERLIN, GERMANY.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 469,214, dated February 16, 1892.

Application filed May 28, 1891. Serial No. 394,388. (No model.) Patented in Germany July 16, 1890, No. 56,641.

To all whom it may concern:

Be it known that I, CARL OBERLÄNDER, of Stettin, in the Empire of Germany, have invented certain new and useful Improvements in Sliding Tables; 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.

The invention has been patented in Germany, No. 56,641, dated July 16, 1890.

This invention relates to an extensible table in which two or more leaves may be inserted or withdrawn at will at each end in order to lengthen the table. In the former case the arrangement is such that by pulling a handle fixed below the end leaf this leaf can be withdrawn from the table-frame and placed beneath the others, and by pushing the said handle this leaf can be returned to its place on the frame. This handle is arranged so that it can be shifted to a small extent and is connected by means of a rod to a cam of peculiar shape, so that by pushing steadily the first extensible leaf the leaf next to it is raised by means of the raising device, hereinafter described, so that the leaf or leaves in before the raised leaf may be pushed under it. When the leaves are required to be drawn up from beneath, leaf holders or grippers having the shape of hooks come into operation and carry away with them the leaves to be reinstated.

In the accompanying drawings, Figure 1 represents a longitudinal section through the devices embodying my invention. Fig. 2 represents a bottom plan view of the same. Fig. 3 represents a longitudinal section through the table-leaves, showing the devices for raising the edges of the leaves when the table is to be closed. Fig. 4 represents a longitudinal section through the leaves, showing the position of the closing device when the first leaf is to be closed. Fig. 5 represents a similar view, only the closing device is acting on the second leaf. Fig. 6 represents a longitudinal section through the table-leaves, showing the devices employed in extending said leaves. Fig. 7 represents a longitudinal section through said leaves, showing the leaves partially extended, also the devices for locking the table-legs. Fig. 8 represents a cross-section of my

table-leaves and guides for the same. Fig. 9 represents in detail, partly in section, a side elevation of the devices employed in locking the table-legs; and Figs. 10 and 11 represent in enlarged details, in side elevation, the devices shown in Figs. 3, 4, and 5 for closing the leaves. Fig. 12 represents a longitudinal section of my device, showing, particularly, the arrangements for limiting the motion of the leaves. Fig. 13 represents in sectional detail view the devices for stopping the extension of the outermost leaf; and Fig. 14 represents a top plan view of the same, partly in section.

A' is the main table-leaf under which the spare leaves are folded. This leaf is rigidly attached to a cross-bar A.

Attached to the framing of the table are the ridges *b b*, upon which the guides B B move. These guides B B are provided with sides *a a*, forming a trough-shaped receptacle, in which the guides *b' b'*, fixed to the outer extension-leaf, hereinafter mentioned, move. The double guides B slide on a wedge-shaped ascending ledge *b*, which is placed at such an angle that when the leaves A² A³ are drawn out they are raised up to the level of the fixed leaf A'. In the bottom *a'* of the outer case or guide B are placed side parts *a* and down-jutting ribs *a*², Fig. 12, which strengthen the cross-pieces *a*³, carrying the ribs Z Z. These ribs engage with the sides *a* in the long slit or groove *a*⁴, whereby the loosening of the guide B is prevented while being drawn out or pushed back. Ribs of the same description are also affixed to the side parts *a*, and grooves *a*⁵ are let into the guides *b'* for the purpose of engaging therewith. The ribs *a*² are so arranged that they strike against the table-frame F if the guide is extended so far that the leaf A² is fully drawn out, as shown in Fig. 12. B can then go no farther. The end of the guide *b'* carries an iron piece *b*², screwed to it, Figs. 12, 13, and 14, which arrests the forward movement of the groove *a*⁵. Thus when *b*² strikes against the stop Z', Fig. 14, *b'*, and necessarily A³ with it, must stop, as they cannot be further extended, Fig. 12.

The leaf A² when extended is supported by the guides B B. The leaf A³ is supported in a similar manner by the guides *b' b'*. To provide the extended leaves with a more sub-

stantial support, I attach legs C C to the outer edge of the leaf A³. The leaf A² is provided with a small angular piece of metal *v*, having a short arm extending downward. This arm
 5 engages the inner edge of leaf A³ when it is being closed, and the latter thereby forces leaf A² to close also. The inner edge of leaf A³ is also provided with an angular piece *n*, pivoted at *n'* and pressed by spring *r*. This
 10 angular piece engages the leaf A² when the table is being extended, and thereby extends said leaf.

When leaf A² is fully drawn, the greater part of the weight of the slightly-raised leaf
 15 A' (because the end support *c* has raised the leaf A' in following the incline of *b*) is instantly thrown on the angle-piece *n*, Fig. 7, so that this must turn round the hinge *n'*, as the weight of the plate A' more than coun-
 20 terbalances the pressure of the spring *r*. The result is that now by drawing still further the handle *f'*, Fig. 3, only the guide *b'*, with its fixed plate A³, can go farther until A³ is also drawn out to its full length, as
 25 shown in Fig. 12.

The devices E (shown in Figs. 3, 4, and 5) are for closing the table, and consist of a rod *f*, operated by handle *f'* and provided with stop *f*². The free end of this lever is piv-
 30 oted at *g*² to a cam *g*, which is pivoted at *g'* to a plate on leaf A³. The inner edge of leaf A² is provided with a hook-shaped spring *h*, set in a recess in said leaf. The outer under edge of leaf A³ is provided with a cross-strip
 35 *e*. To this strip I hinge the legs C C, connected by strip C' at *c'*. A recess is cut in the under side of leaf A³, and a piece of spring metal is pivoted to one edge of said recess. A spring *v'* is set in said recess to bear
 40 against said piece of spring metal, which is provided with an arm *i*, which engages the rigid catch *k* on cross-piece C'. A spring-catch *k'* is secured to another side of cross-piece C' and engages an elbow projection *i*²,
 45 set in cross-piece *e*. The spring-metal piece carrying arm *i* is provided with a knob *e*³ for depressing it into the recess in said leaf A³. In the contrivance shown in Fig. 9 for the leg C it may be necessary when one wishes to
 50 put the lowered leg back into its place to move the hook *i*² upward, which can be done in different ways. The support *c*, fixed to guide B, supports the leaf A'. The leaf A² is fixed to said guide B by means of an iron elbow *d*.
 55

Both ends of the extension-table are operated in the same manner, and I will therefore describe the operation of but one end only. Supposing the extension part of the
 60 table to be closed, I first grasp the cross-piece *e* or handle *f'* and by pulling steadily the

leaves A² and A³ are extended, the hook *n* on leaf A³ engaging the hook *v* on the rear side of leaf A², and thereby preventing the
 leaf A³ being drawn alone. When leaf A² has
 65 reached its full extending limit, the hook *n* disengages its inner edges and allows the leaf A³ to be drawn from under it and fully extended, as shown in Fig. 6. During this operation the guides B, *b*, and *b'* have kept in
 70 position and supported the leaves A² and A³. The knob *e*³ is now pressed, thereby disengaging the arm *i* from the catch *k* and allowing the legs C to fall into a vertical position, in which position they are held by means of
 75 arm *i*² engaging the spring-catch *k'*, as plainly shown in Fig. 9. If in extending the table the handle *f'* is pulled, the stop or shoulder *f*² engages the cross-piece *e*, through which the rod *f* passes, and thereby prevents
 80 undue strain on the cam *g* and its pivotal points *g'* and *g*². If it is now desired to close the leaves, the handle *f'* is pushed in, thereby bringing the cam *g* in contact with the outer edge of leaf A² and raising said edge, when a
 85 slight pressure on leaf A³ will slide it under leaf A². The handle *f'* is again pressed in, and the cam *g*, coming in contact with the spring-hook *h*, forces it against leaf A', thereby depressing said leaves A³ and A², so that
 90 they may be readily pushed under leaf A'. The legs of course were first lifted into a horizontal position, where they were kept by catch-arm *i* engaging catch *k*.

Having thus fully described my invention, 95 what I claim as new, and desire to secure by Letters Patent, is—

1. In an extensible table, the combination of a hook or catch *v*, attached to one leaf, with an articulated hook *n*, attached to another leaf
 100 and arranged to catch over the former hook, and a spring *r*, operating to force the said hook upward into such engagement, substantially as set forth.

2. In an extensible table, the combination 105 of the cam *g*, pivoted to the lowermost leaf thereof at its rear edge, with the rod *f*, attached to said cam, the handle *f'*, attached to said rod, and suitable guides for said rod and handle, the said cam being attached to the said
 110 leaf at one edge and extended under the contiguous part of the next leaf, so that it will lift the latter when operated by pushing in the said handle, substantially as set forth.

In witness whereof I have hereunto signed 115 my name in the presence of two subscribing witnesses.

CARL OBERLÄNDER.

Witnesses:

JOH. ADLER,
 ERWIN MULLER.