E. L. AND J. WEST.

PRINTER'S TABLE.

APPLICATION FILED MAY 16, 1919.

1,343,600.

Patented June 15, 1920.

2 SHEETS—SHEET 1.

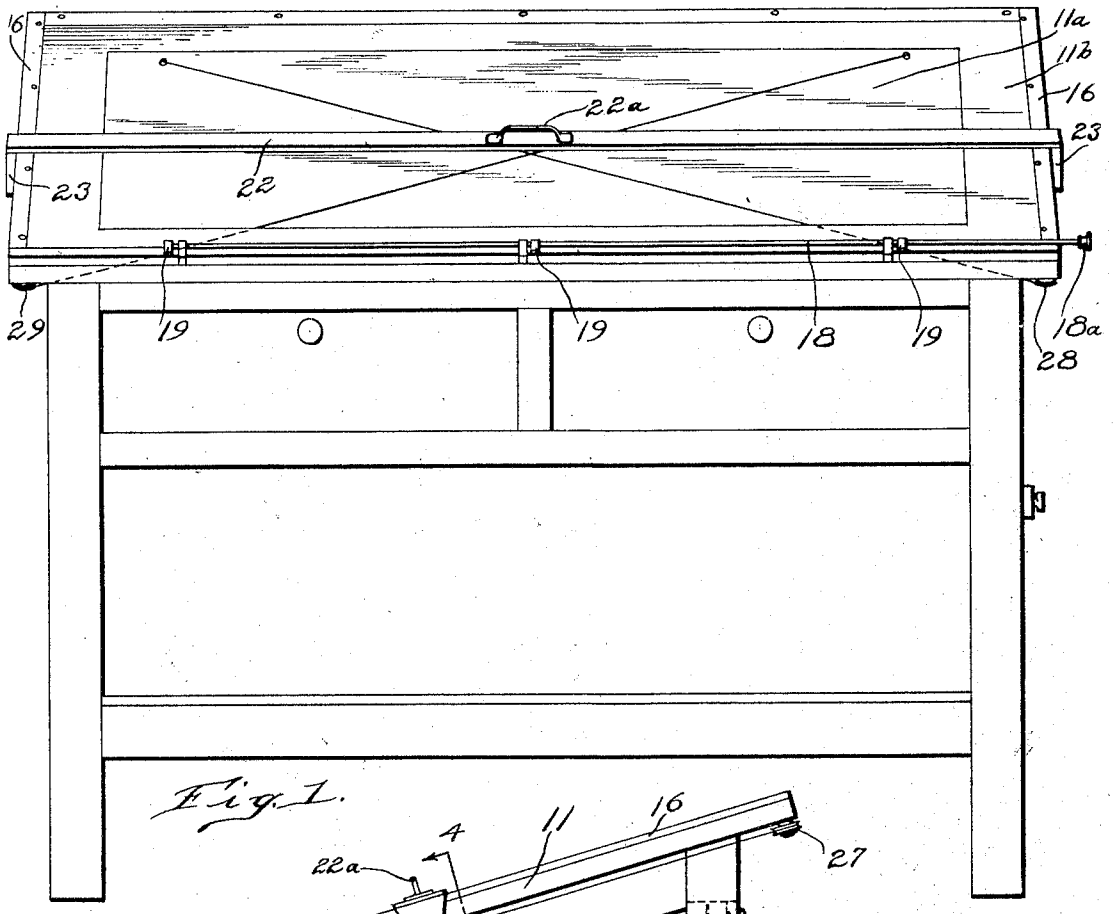


Fig. 1.

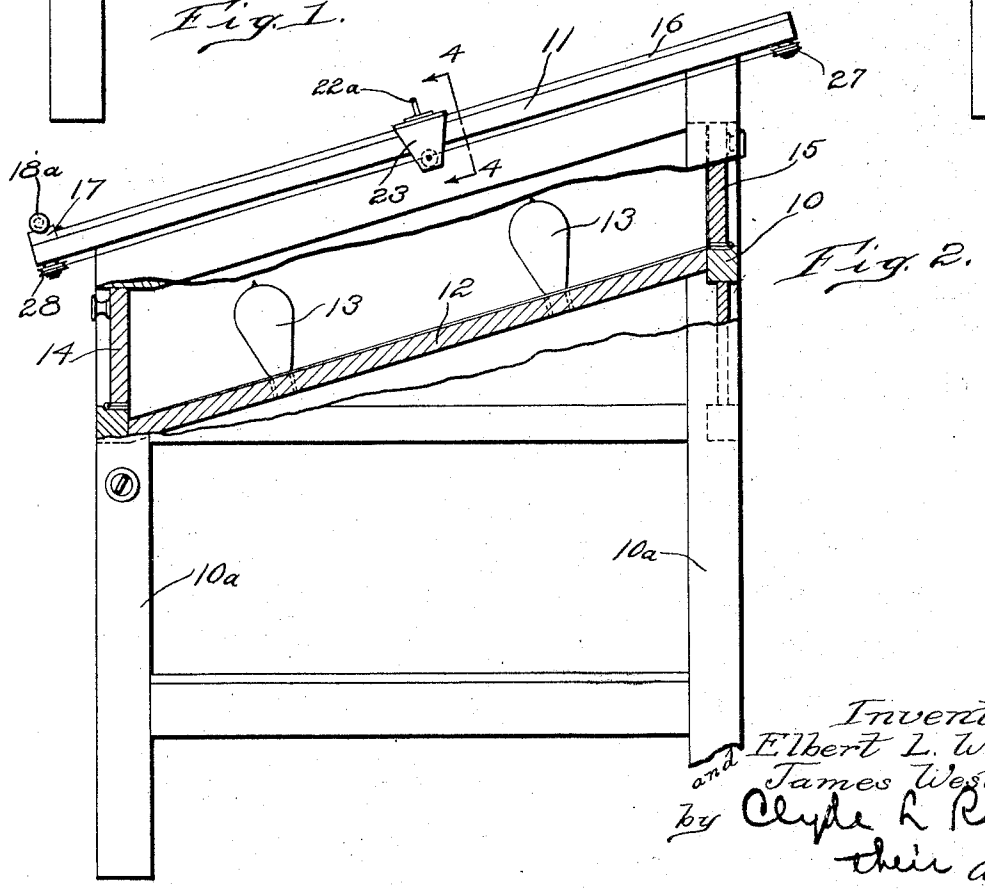


Fig. 2.

Inventors:
Elbert L. West
and James West
by Clyde L. Rogers
their atty.

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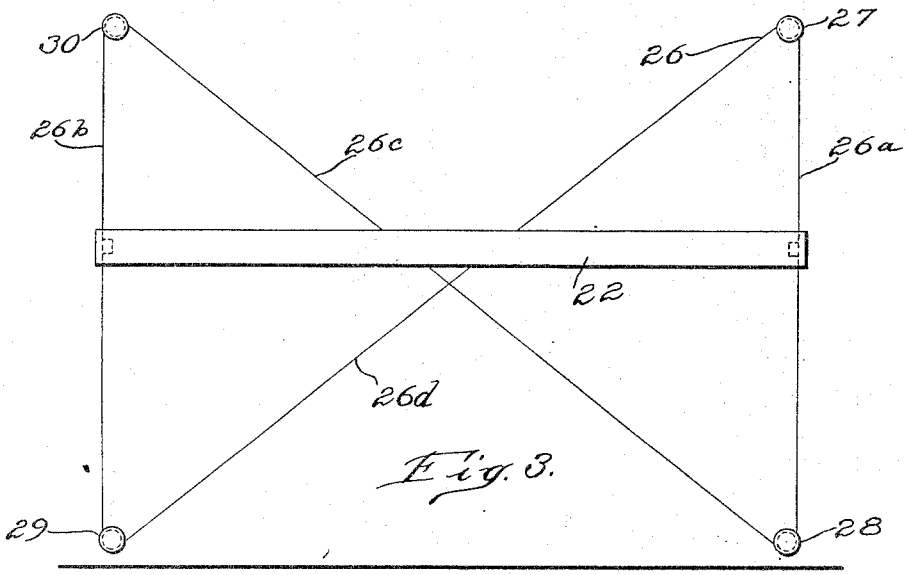


Fig. 3.

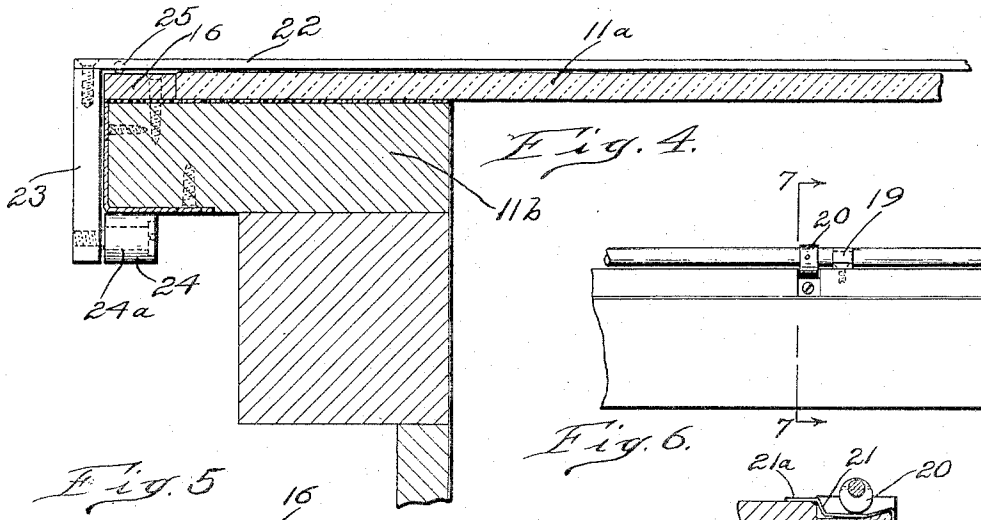


Fig. 4.

Fig. 5

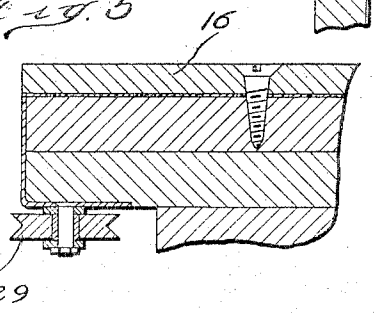


Fig. 6.

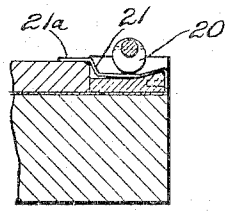


Fig. 7.

Inventors:
and Elbert L. West
James West
by Clyde L. Rogers
their Atty.

UNITED STATES PATENT OFFICE.

ELBERT L. WEST, OF SOMERVILLE, AND JAMES WEST, OF BOSTON, MASSACHUSETTS, ASSIGNORS TO PREMIER REGISTER TABLE COMPANY, OF BOSTON, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

PRINTER'S TABLE.

1,343,600. Specification of Letters Patent. Patented June 15, 1920.

Application filed May 16, 1919. Serial No. 297,542.

To all whom it may concern:

Be it known that we, ELBERT L. WEST and JAMES WEST, citizens of the United States, and residents, respectively, of Somerville, in the county of Middlesex and Commonwealth of Massachusetts, and of Jamaica Plain, Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented an Improvement in Printers' Tables, of which the following description, in connection with the accompanying drawings, is a specification, like characters on the drawings representing like parts in each of the several views.

This invention relates to furniture for printers' uses adapted for inspecting proof sheets to determine the alinement thereof, such as large sheets on which are arranged series of printed units such as a number of pages of a book which are to be printed simultaneously, and which it is required to arrange in precise alinement with one another so that when cut and trimmed the marginal edges of all the pages will be uniform. For this purpose the invention consists in a printer's table equipped with a transparent top preferably of glass with illuminating means such as electric lamps thereunder, the top of said table being equipped with sheet alining and clamping means, and also preferably with an alining bar or ruler that is mounted and connected for adjustment toward and away from the base of the table with provision for holding the same always parallel with the table base. A further object is to provide a printer's table of the kind stated with improved sheet alining and clamping means. A still further object is to provide improved means for holding an alining bar or like straight edge in precise parallelism with a given base line which in the present instance is the base of the table. The foregoing and other objects and advantages of the invention will more fully appear from the following detailed description, and the distinctive features of novelty will be pointed out in the appended claims.

Referring to the drawings:

Figure 1 is a front view of a table embodying the invention;

Fig. 2 is a side view with an upper portion partially broken away in section;

Fig. 3 is a diagrammatic view illustrating the manner of holding the alining bar in parallelism with a base line;

Fig. 4 is an enlarged sectional detail on line 4—4 of Fig. 2;

Fig. 5 is a fragmentary sectional detail of a corner of the table;

Fig. 6 is a partial front view of the table edge illustrating the sheet clamping means; and

Fig. 7 is a transverse section on line 7—7 of Fig. 6.

10 indicates a table structure of suitable dimensions, preferably rectangular and oblong and with legs 10^a supporting an inclined top 11 at a forward incline, this incline and the elevation of the table top being such as to locate the table top so as to be convenient for inspection. Some little distance below the table top 11 an inclined floor 12 is arranged preferably white surfaced and equipped with suitable lighting means, shown as a plurality of incandescent electric lamps 13 socketed in spaced apart relation over said floor. These lamps and the interior space between the floor 12 and the table top are accessible by means of hinge doors 14, 15 at the front and back of the table respectively. The table top 11 comprises a transparent plate 11^a of glass covering substantially the entire top and retained in place by suitable end strips 16 of metal, the bottom of said plate resting against a straight edge bar 17 fixed at the lower edge of the top. The glass plate 11^a as shown, rests on a peripheral or border surface 11^b constituting a sub-top frame which may be of wood and surfaced with felt or the like. Mounted on and coöperative with the straight edge bar 17 at the base of the top, is suitable means for clamping a proof sheet to be examined, immovably on the top and in alinement with the straight edge 17. For this purpose we show a rod 18 mounted to turn in spaced apart bearings 19 secured to the bar 17, this rod having fixed thereon at intervals cams or eccentrics 20 adapted to engage with spring

clips 21 secured at one end to the bar and having their free ends 21^a constituting spring clamping fingers adapted to engage and clamp frictionally the edge of a paper sheet resting on the plate 11^a and with its edge alined against the straight edge bar 17. An alining straight edge bar 22 extending the length of the table is provided for adjustment transversely thereof and equipped with means for holding it always in accurate parallelism with the straight edge bar 17. For this purpose the alining bar 22 has cheek pieces 23 secured at each end thereof extending downward past the edge of the table top and equipped at their lower ends with rollers 24 engaging underneath the edges of the top. To further reduce friction in the movement of this alining bar over the table top its ends may be provided with ball bearings 25 operable over the metallic edges 16 at the ends of the top. The ends of the alining bar 22 are fixed to parallel stretches 26^a, 26^b of a continuous taut wire or filament 26 which is mounted on pulleys 27, 28, 29, 30, secured at the respective corners of the table top and to the underneath side thereof, the intermediate portions of such filament extending diagonally across the top underneath the same as indicated at 26^c, 26^d. This filament may be engaged with the ends of the bar 22 in any suitable manner, but as shown we clamp the same to the lower ends of the cheek pieces 23 by means of shouldered studs 24^a which are threaded into the cheek pieces and which serve as pivots for the rollers 24. The alining bar 22 may be provided with a handle 22^a by which it may be conveniently actuated and with the described arrangement of the filament 26 it is held to move precisely in parallelism with the base edge 17, and this condition will obtain even though the filament 26 be not maintained in a particularly taut condition, one distinctive advantage of the particular disposition of the filament 26 as described, being that a mere slippage of the filament in either direction will not disturb the parallel relation of the alining bar, the alinement of which would only become imperfect if there were so much looseness in the filament that one side thereof might sag appreciably with reference to the other side, whereas in all previous devices of the kind so far as known to us it has been necessary to keep the filaments in a very taut condition for the proper functioning of the alining bar.

In use a proof sheet bearing impressions of a series of book pages or the like arranged in rows, is placed on the glass table top and slid downward thereon until its lower edge is alined against the base alining bar 17 whereupon it may be clamped by actuation of the rod 18, which for this purpose is projected at one end and equipped with a handle knob 18^a. Then the alining bar 22 is moved upward and outward over the table to determine the alinement of the printed pages on the proof sheet, the lighted interior of the table permitting the alinement of the matter on both sides of the sheet with respect to each other to be determined by the light projected upward through the sheet as will be readily understood. We are aware that the invention may be embodied in other specific forms without departing from the spirit or essential attributes thereof, and we therefore desire the present embodiment to be considered in all respects as illustrative and not restrictive, reference being had to the appended claims rather than to the foregoing description to indicate the scope of the invention.

Having described our invention, what we claim as new and desire to secure by Letters Patent is:

1. A printer's table equipped with a transparent top and with means for projecting light upward therethrough, said top having an alining edge at one side thereof with sheet clamping means arranged to clamp a sheet alined by said edge, and an alining bar mounted for movement transversely across the table toward and from said alining edge.

2. A printer's table equipped with a transparent top and with means for projecting light upward therethrough, said top having an alining edge at one side thereof with sheet clamping means arranged to clamp a sheet alined by said edge.

3. A printer's table equipped with a transparent top forwardly inclined with an alining ledge at the lower edge thereof and with sheet clamping means arranged to clamp a sheet alined by said ledge and an alining bar mounted for movement transversely across the table toward and from said alining ledge and equipped with means for preserving its parallelism therewith.

4. A printer's table equipped with a transparent top with means for projecting light upward therethrough, and an alining bar mounted for movement transversely over said top and equipped with means for preserving its parallelism with an alining edge of said table.

5. A printer's table, comprising a plane surfaced inclined top with a transparent portion through which light may be projected upward, said top having an alining ledge at the lower edge thereof equipped with sheet clamping means formed as spring clips, and an alining bar mounted for movement over said top toward and from said alining ledge having depending cheek members carried thereby and equipped with antifriction members engaging said top, and

means for preserving parallelism of movement of said bar with respect to said alining ledge of the table top.

6. A printer's table, comprising a glass top equipped with means for projecting light upward therethrough and with an alining ledge at one side thereof, and sheet clamping means associated with said alining ledge consisting in a plurality of spring fingers with a single rotary actuating device arranged for directly engaging and pressing said fingers simultaneously into engagement with the sheet.

In testimony whereof, we have signed our names to this specification.

ELBERT L. WEST.
JAMES WEST.