Nov. 19, 1935. W. J. W. WILSON 2,021,214

BOOKBINDER'S CASE GAUGE

Filed Jan. 8, 1934

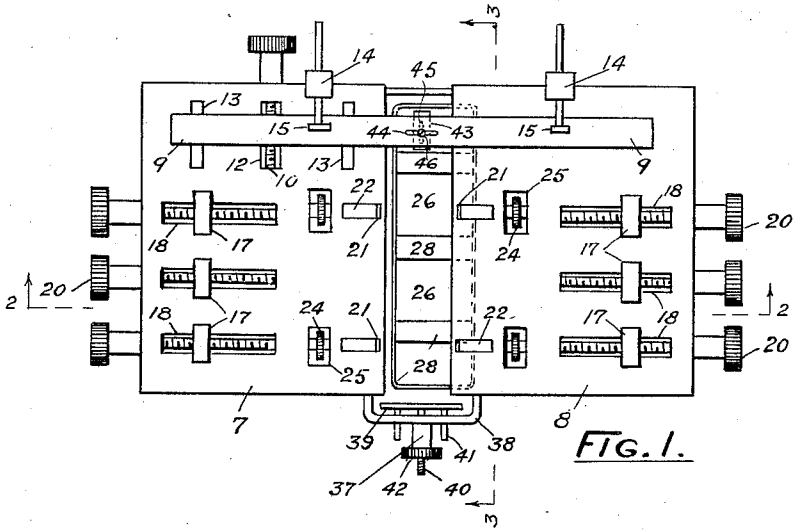


FIG. 1.

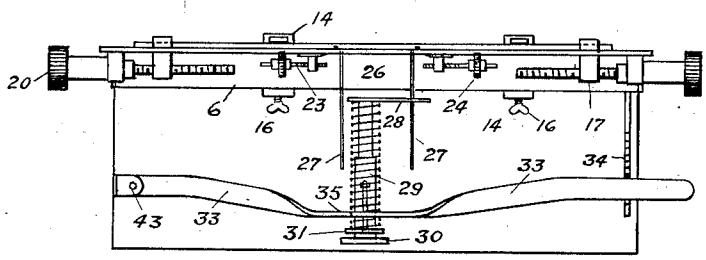


FIG. 2.

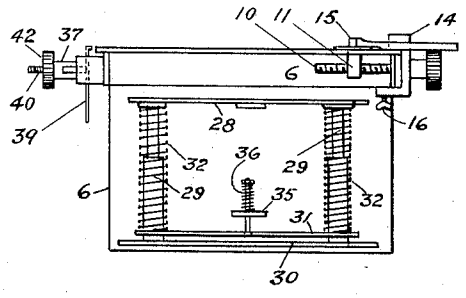


FIG. 3.

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UNITED STATES PATENT OFFICE

2,021,214

BOOKBINDER'S CASE GAUGE

Walter John William Wilson, Victoria, British Columbia, Canada

Application January 8, 1934, Serial No. 705,832
In Canada April 8, 1933

10 Claims. (Cl. 11—1)

This invention relates to a bookbinder's case gauge, its prime objects are to facilitate, simplify and improve the efficiency of some of the operations concerned in the art of bookbinding. This art which has hitherto, to a very large extent, partaken of the nature of one of the strict handcrafts, has naturally been confronted with corresponding difficulties when mass production of books has been called for, and an object of this invention has been to greatly increase the rapidity of affixing and securing cases (or book covers) and also with much greater precision and exactitude than has hitherto been practicable with the slower hand processes.

The invention resides in the novel combination and arrangement of parts, as fully described herein with the aid of the drawing which accompanies and forms a part of this application, and in which

Fig. 1 is a plan view of the device,

Fig. 2 is a longitudinal elevation on line 2—2 of Fig. 1 and

Fig. 3 a cross sectional elevation on line 3—3 of Fig. 1.

The drawing indicates one preferred embodiment of the invention, but is not intended to be limitative as regards precise details of construction except as such may fall within the language and the scope of the claims.

It will be observed that the device is in table form, the top surface plate or table proper being divided transversely into two portions so as to leave a rectangular recess between them for the reception of the back strips.

The width of this recess is made adjustable by longitudinal movement of one half of the table top. This back strip recess is also adjustable longitudinally and is provided with a suitable vertical feed device for the proper presentation of the strips.

A variety of other adjustments and devices in connection with the reception and manipulation of the boards, cloth, and other elements concerned are arranged adjacent the table surface and are more specifically referred to as the description is further disclosed and developed.

The numeral 6 indicates the general framework of a rectangular table which may be constructed in any convenient manner as with vertical angle-irons to form the corner uprights, secured in any convenient and usual manner to make a rigid support for the horizontal table plates 7 and 8, the former being the fixed portion thereof. The adjustable portion 8 of the rectangular table is securely held in any desired position by transverse bolt 47 and wing nut 48 which operating through the framework 6 causes the latter to securely grip strips or projections 49 affixed to the under side of the adjustable table plate. Slidable transversely over the top surface of the table plates 7 and 8 is the rectangular cross-sectional flat guide bar 9 against which the top edge of the book boards are abutted. This guide bar is actuated and adjusted by the revolvable screw 10 which engages the nut 11 traversing the screw 10 and the longitudinal guide slot 12 in the top of the table 7.

The additional guide slots 13 which are engaged by corresponding projections on the lower side of the guide bar 9 provide the necessary restraining action to the latter and insure its parallel movement.

Removable clamping gauges 14 provide a ready means for adjusting the top gauge 15 and are secured to each half of the table top 7 and 8 by clamp screw 16. On the outer portion of each half of the table top are side gauges 17 which are traversed longitudinally in the parallel slots 18 and actuated therein by the screw and nut device below them which is adjustable by the milled hand-wheels 20. Joint gauges for positioning the back boards in relation to the back strips are provided at 21. The stops which constitute the joint gauges are slidable in the short slots 22 and actuated longitudinally therein by nut and screw device below them, the screw member thereof 23 being actuated by revolution of the small milled hand-wheel 24 within the slot 25 and immediately below the surface of the table top 7 and 8.

The back strip recess 26 is a salient feature of the device. The walls 27 of this recess are each secured to their respective portions of the table tops 7 and 8 and between them is a vertically slidable table construction 28 supported by the telescopic support 29 the lower tubular member of which is secured to and supported by the flat plate member 30.

Slightly above the plate 30 is a similar plate 31, between this member and the table 28 and at each end thereof are vertical springs 32 which afford the slight upward thrust required for automatically feeding the back strips upwardly as they are made use of. This lifting effect is further regulated or adjusted by a hand lever 33 which is fulcrumed at 43 and at its opposite end projects conveniently beyond the end of the table framework, and is adapted to engage a ratchet bar 34. This lever 33 which is conveniently formed of a flat bar is twisted at its centre 35

so that its flat surfaces are horizontal where they connect to the spring supporting plate 31 through a spring and bolt attachment 36.

A back strip longitudinal adjustment is provided at 37 and consists of a bracket 38 secured to the framework 6 and carrying a movable plate 39 secured to the screw 40 and the pin guides 41 horizontally movable in the bracket 38. The screw 40 is reciprocated by the restrained hand nut 42 which its thread engages.

A further longitudinal adjustment to the back strip is provided at the opposite end thereof and consists of a short flat plate 43 having an abrupt downturned end and positioned and slidable against the underside of the flat gauge plate 9, each of the plates 43 and 9 having a longitudinal slot 44 and 45 respectively and the two slots being right angularly disposed to each other and secured in any desired relation by the screw bolt 46, so that in addition to the longitudinal adjustment there is a transverse adjustment whereby a very narrow back strip may be promptly allowed for. By these two independent longitudinal adjustments a gauge-stop is provided at each end of the back strip.

In operation the case gauge is adjusted and set in all its particulars to conform with the specifications of the required cases, and in further preparation a sufficient quantity of back strips are then placed in the back strip recess 26 and on the carriage 28.

Two boards are then placed flat on the table 7 and 8 with their edges respectively fitting between and abutting on the flat guide bar 9, side gauges 17 and joint gauges 21. Glued cloth is then placed with its moist surface downwards and its further edge abutting on the edges of the top gauges 15. The cloth surface is then rubbed over by hand, thus ensuring the adhesion thereto of the boards and back strip, so that the whole assembly may be instantly removed and the process expeditiously repeated.

What I claim as my invention and desire to secure by Letters Patent, is:—

1. A bookbinder's adjustable case gauge comprising a framework construction supporting a horizontal table, said table being divided transversely into two portions, one being slidable from or towards the other and adjustable in any desired position whereby a relatively narrow rectangular recess is provided between the two said portions of the table top, said recess being adapted to receive back strips.

2. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table, said table being divided transversely into two portions, one being slidable from or towards the other, thus providing a relatively narrow rectangular recess to receive the back strips, and a corresponding rectangular table construction within said recess and below said table top, said table construction being adapted to receive back strips in stack or quantity and to retain the uppermost of said back strips substantially in the same horizontal plane as the upper surface of the said table top.

3. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table divided transversely into two portions one of which is adjustable thus providing a comparatively narrow recess contained within which is a table construction adapted to receive back strips in quantity and means for upwardly feeding the back strips by raising the said table construction and further means for regulating and controlling said feeding motion.

4. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table in two parts, one fixed and the other adjustable forming a relatively narrow rectangular recess as required within which is a second table construction adapted to receive a quantity of back strips and means of upwardly feeding the back strips by raising the table construction and further means for regulating and controlling said feeding motion, and also gauge stop means for limiting and adjusting and registering both ends of said back strips.

5. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table in two parts, one fixed and the other adjustable forming a relatively narrow rectangular recess as required within which is a second table construction adapted to receive a quantity of back strips and means of upwardly feeding the back strips by raising the table construction and further means for regulating and controlling said feeding motion and also gauge stop means for limiting and adjusting and registering both ends of said back strips, and having in addition laterally adjustable joint gauge stops adjacent to each longitudinal edge of said back strip recess whereby the joint space may be determined.

6. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table in two parts, one fixed and the other adjustable forming a relatively narrow rectangular recess as required within which is a second table construction adapted to receive a quantity of back strips and means of upwardly feeding the back strips by raising the table construction and further means for regulating and controlling said feeding motion and also gauge stop means for limiting and adjusting and registering both ends of said back strips, and having in addition laterally adjustable joint gauge stops adjacent to each longitudinal edge of said back strip recess whereby the joint space may be determined, and also whereby the inner edges of the boards may be positioned.

7. A bookbinder's adjustable case gauge of character described comprising a framework construction supporting a horizontal table in two parts, one fixed and the other adjustable forming a narrow rectangulalr adjustable recess containing a second table construction to receive and carry a quantity of back strips with means of upwardly feeding the same and further means of regulating and controlling the feeding motion, and gauge stop means for limiting, adjusting and registering both ends of the back strips; also laterally adjustable joint gauge stops situated on opposite sides of the table recess and capable of being adjusted and fixed in such relative lateral positions to the table recess as may determine the joint spaces and register the inner edges of the boards, and in addition adjustable side gauge stops positioned adjacent to the ends of each portion of said table top and adapted to form an abutment to the outer edges of, and to hold in required position, the two case boards.

8. A bookbinder's adjustable case gauge of character described comprising a framework construction supporting a horizontal table in two

parts, one fixed and the other adjustable forming a narrow rectangular adaptable recess containing a second table construction to receive and carry a quantity of back strips with means of upwardly feeding the same and further means of regulating and controlling the feeding motion; and gauge stop means for limiting, adjusting and registering both ends of the back strips; also laterally adjustable joint gauge stops situated on opposite sides of the table recess and capable of being adjusted and fixed in such relative lateral positions to the table recess as may determine the joint spaces and register the inner edges of the boards and in addition adjustable side gauge stops positioned adjacent to the ends of each portion of said table top and adapted to form an abutment to the outer edges of, and to hold in required position, the two case boards; and further having a top guide bar to form an abutment for the top edge of the case boards so constructed as to be movable only in parallelism with the longitudinal edge of the table with means for adjusting and securing said top guide bar.

9. A boodbinder's adjustable case gauge of character described comprising a framework construction supporting a horizontal table in two parts, one fixed and the other adjustable forming a narrow rectangular adaptable recess containing a second table construction to receive and carry a quantity of back strips with means of upwardly feeding the same and further means of regulating and controlling the feeding motion; and gauge stop means for limiting, adjusting and registering both ends of the back strips; also laterally adjustable joint gauge stops situated on opposite sides of the table recess and capable of being adjusted and fixed in such relative lateral positions to the table recess as may determine the joint spaces and register the inner edges of the boards, and in addition adjustable side gauge stops positioned adjacent to the ends of each portion of said table top and adapted to form an abutment to the outer edges of, and to hold in required position the two case boards; and further having a top guide bar to form an abutment for the top edge of the case boards so constructed as to be movable only in parallelism with the longitudinal edge of the table with means for adjusting and securing said top guide bar, and also having an adjustable and removable cloth guide positioned from the top edge of the said table and adapted to provide gauge stops upon the upper surface of the said top guide bar.

10. A bookbinder's adjustable case gauge of character described and comprising a framework construction supporting a horizontal table, said table being divided transversely into two portions one portion movable longitudinally with respect to the other and thus providing a relatively narrow rectangular recess between the two portions, said recess being adapted to receive back strips, a table constructed to automatically feed the back strips, gauge stops in a suitable position to retain the back strips in correct transverse position, and on the surface of the horizontal table, gauge stop means for correctly adjusting and positioning the joint spaces and case boards in their respective longitudinal relationships to the back strip recess, guide bar means for accurately adjusting and registering the case boards transversely with respect to the back strip recess, and gauge stop means for positioning the glued cloth as applied in its required relationships to the edges of the case boards as determined by the case board stops, and all contained in one cooperative unit.

WALTER JOHN WILLIAM WILSON.

CERTIFICATE OF CORRECTION.

Patent No. 2,021,214. November 19, 1935.

WALTER JOHN WILLIAM WILSON.

It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the drawing, Figures 1 and 2 should appear as shown below instead of as shown in the patent:

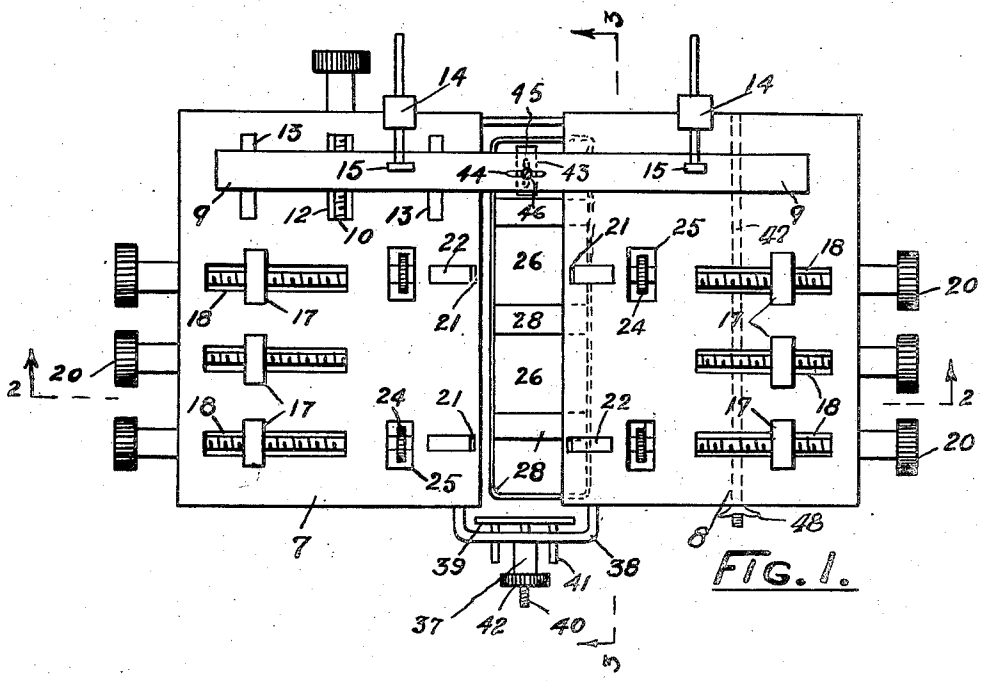


FIG. 1.

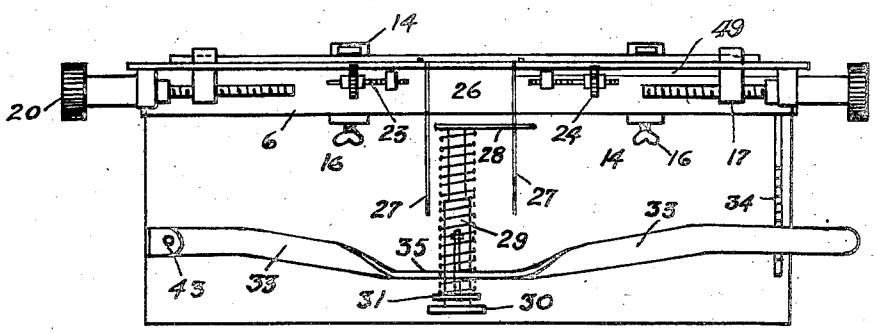


FIG. 2.

and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 26th day of October, A. D. 1937.

Henry Van Arsdale,

(Seal) Acting Commissioner of Patents.