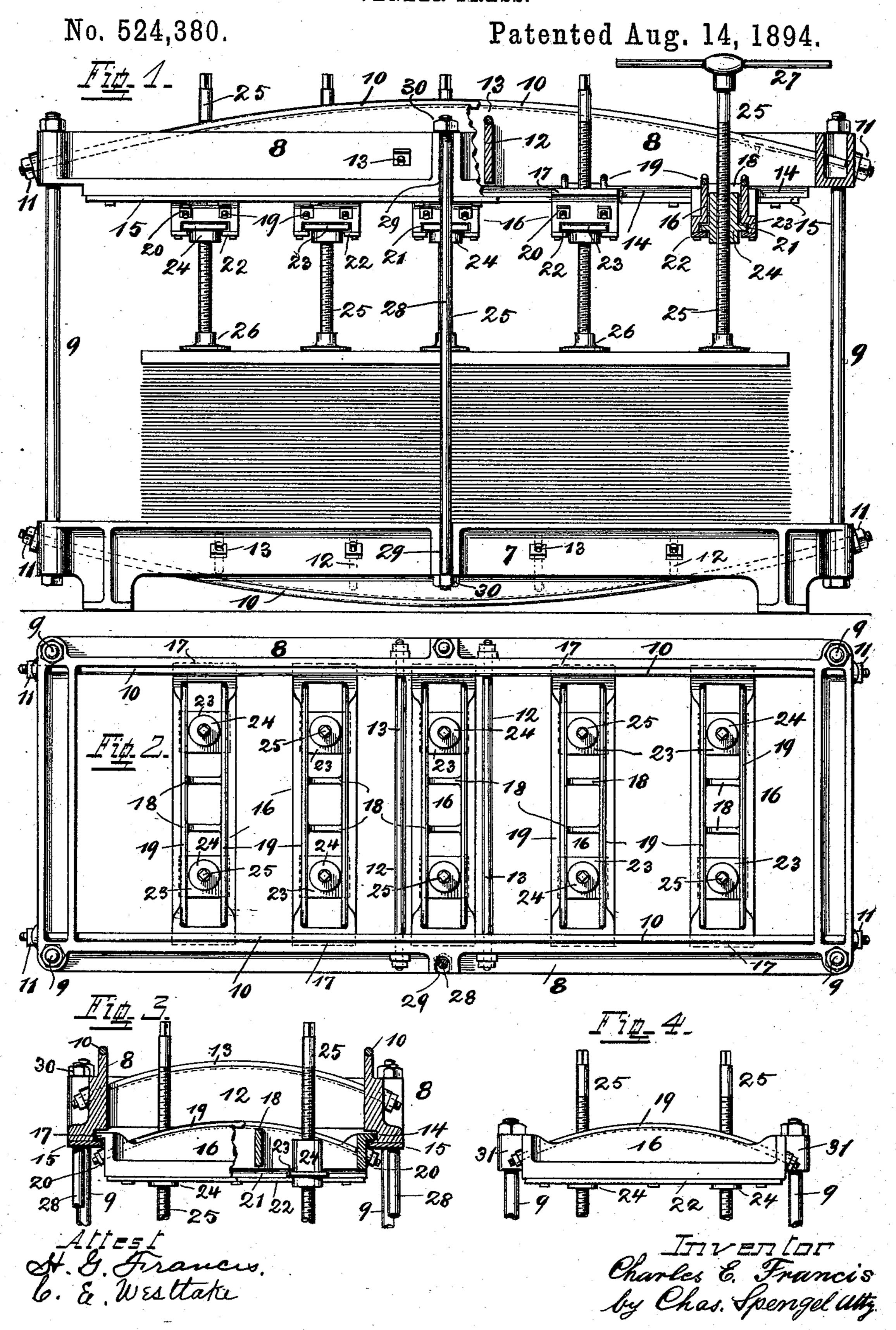
C. E. FRANCIS. VENEER PRESS.



United States Patent Office.

CHARLES E. FRANCIS, OF CINCINNATI, OHIO.

VENEER-PRESS.

SPECIFICATION forming part of Letters Patent No. 524,380, dated August 14, 1894.

Application filed May 9, 1894. Serial No. 510,584. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. FRANCIS, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State 5 of Ohio, have invented certain new and useful Improvements in Veneer-Presses; and I do 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. to it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

The subject of this invention relates to devices used for the purpose of pressing veneering and preventing it from warping out of shape while going through the drying-process. As a press the device may of course 20 be used on other objects in a similar manner.

The novelty of this invention resides in the combination of a number of screws or pressure-exerting devices with a base and top common to all, the combination being such as to 25 permit a longitudinal as well as lateral adjustment of the former devices on their supports, to suit the size and position of the objects to be pressed.

Other novel features consist of the details 30 of the general construction of the parts, as

will appear more fully hereinafter.

The invention is fully described in the following specification and pointed out in the claims thereof, as well as illustrated in the

35 accompanying drawings, in which— Figure 1, is a side-elevation of such a press, parts of it being shown in section. Fig. 2, is a top-view of the same. Fig. 3, is a cross-section of the upper part of it and Fig. 4, is a 40 side-view of one of the pressure-exerting devices detached and when used individually. 7, is the base and 8, the top of the press, the two secured to each other by tie-rods or uprights 9. Base and top consist substan-45 tially of rectangular frames of cast-iron, having their longer sides curved as shown and strengthened by wrought-iron tie-rods 10, which stretch over said curved sides and are drawn tight by nuts 11, at their ends where

50 they project beyond the frames. Base-frame | 7, is closed on its upper surface or side, to provide a floor for the support of the objects to I

be pressed, while top-frame 8, two braces 12, excepted, is open between its sides, to afford space for the reception and adjustment of the 55 pressure-exerting devices. Braces 12, are curved on their upper edges and in connection with tie-rods 13, which stretch over them, form additional means to strengthen and brace the top cross-ways. Similar braces and 60 tie-rods are provided in the base-frame. The inner, under edges of the longer sides of top 8, are provided with rabbets 14, which in combination with strips 15, bolted against the under-surface of said sides, form supports and 65 ways on which a suitable number of the pressure-exerting devices adjustably rest. These latter consist substantially of open rectangular frames 16, provided with flanges 17, at their ends, which latter fit into the ways 70 formed by strips 15, and the rabbets 14, of the longer sides of top 8. These frames are strengthened by braces or ribs 18, and by tierods 19, which stretch over the longer, upwardly-curved sides of said frames and are 75 drawn tight by nuts 20, secured at their ends where they project beyond the ends of frames 16. These braces 18, are of great importance as they prevent the longer sides of frames 16, from twisting or collapsing sidewise, to which 80 they have a tendency, induced by the pressure and strain of tie-rods 19, against their upper edges. The under-surfaces of the longer sides of these frames 16, are rabbeted at 21, and provided with strips 22, which together 85 form ways for the adjustment and support of flanges 23, of nuts 24. These nuts of which there are preferably two to each one of the frames 16, are provided with screws 25, which latter have shoes 26, at their lower ends where 90 they come in contact with the objects to be pressed and at their upper ends they are square to enable them to receive the socket of a suitable implement 27, by which they are operated. As will be observed, screws 25, may 95 be adjusted longitudinally as well as laterally, to suit the length and width or position of the objects (veneering), to be pressed. To prevent base and top from spreading

when under pressure, additional tie-rods or 100

uprights 28, are provided which connect the

is being filled, one of these uprights may be

two former about midway between their ends.

For convenience of access, while the press

removed, which is accomplished by having the holes in top and base through which it passes, open at their sides, so as to form grooves or notches 29, through which said up-5 right may be readily removed sidewise, as soon as one of nuts 30, at either one of its ends is sufficiently loosened.

Having described my invention, I claim as

new--

combination with a base and top, of a number of pressure-exerting devices supported on the latter in a manner to be longitudinally and transversely adjustable thereon and means to connect base and top, all as substantially

shown and described.

2. In a press for the purpose described, the combination with a base and top, the latter provided with rabbets 14, and strips 15, of 20 frames 16 having flanges 17, by which they are supported in the ways or grooves formed by rabbets 14, and strips 15, flanged nuts adjustably supported in ways on frames 16, screws carried by these nuts and means to connect base and top, all as substantially shown and described.

3. In a press for the purpose described, the combination with the top thereof, of frames 16, adjustably supported on the latter, nuts

adjustably supported on frames 16, and screws 30 25, engaging with said nuts, all as substan-

tially shown and described.

4. In a press for the purpose described, the combination with the top thereof, of frames 16, adjustably supported thereon, rabbets 21, 35 and strips 22, provided at the under-surface of the long sides of frames 16, nuts adjustably supported in the ways formed by said rabbets and strips, and screws 25, engaging with said nuts, all as substantially shown and described.

5. In a press for the purpose described, the combination of the top thereof having ways formed by rabbets 14, and strips 15, frames 16, having flanges 17, by which they are supported in said ways, and further provided with ways formed by rabbets 21, and strips 22, nuts 24, having flanges 23, by which they are supported in the ways of frames 16, and screws 25, engaging with nuts 24, all as substantially shown and described.

In testimony whereof I affix my signature in

presence of two witnesses.

CHARLES E. FRANCIS.

Witnesses:
CHAS. V. HAIGHT,
CHAS. SPENGEL.