To all whom it may concern:

Be it known that I, JAMES K. ASHLEY, a citizen of the United States, residing at Science Hill, in the county of Pulaski and State of Kentucky, have invented a new and useful Egg-Case Machine, of which the following is a specification.

The present invention has reference to box forming machines, and aims to improve generally the construction as shown in my patent dated March 11, 1902, and which bears Patent Number 695,364.

An important object of the invention is to provide means to facilitate the operation of the machine by increasing the leverage on the operating bar and locating the operating handle in a manner to cause the vertical slides to move under the minimum amount of pressure.

Another object of the invention is to provide means for adjusting the packing frames to permit end sections supplied with cleats, to be positioned thereon.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawings:

Figure 1 is a side elevational view of the machine constructed in accordance with the invention.

Figure 2 is a plan view thereof.

Figure 3 is a longitudinal sectional view taken at a point below the table of the machine.

Figure 4 is an enlarged detail view of one of the end supports of the machine.

Figure 5 is an elevational view disclosing one of the adjustable backing frames or supports.

Referring to the drawings in detail, the support is shown as embodying a table 5, which is supported by the leg members 6, suitable brackets 7 being provided at the end of the table for securing the supporting legs in position so that the table will be rigidly braced against movement, while in operation.

Bars 8 connect the leg members at each end of the table and these bars provide supports for the brackets 9 that have pivotal connection with the arms 10 that extend inwardly therefrom, the bracket members 9 being secured to the bars 8 at points adjacent to the forward edges thereof.

The arms 10 have inwardly extended inner ends that support the bar 11, which operates at a point substantially intermediate the side edges of the table 5 but in proximity to the bars 8. Bar 12 has connection with the right angled ends 13 of the arms 10 and are secured by means of bolts 18, so that movement of the bar 12 results in a relative movement of the bar 11.

Arranged intermediate the ends of the bar 12 is an operating arm 15 which has its lower end secured to the bar 12 by means of the bolt 16 the upper end of the lever extending at an angle as clearly shown by Figure 2 of the drawings to allow free movement of the operator’s arm when the machine is in use.

Connecting the bar 12 and arm 15 is a bracing bar 17, bracing bar 18, which is associated with the bar 17 being also connected to the arm 15 to brace the same against movement with respect to bar 11.

The inner end of bar 18 connects with the bar 11 and is secured by means of bolt 19 so that as the arm 15 is moved, the bar 11 will also be moved. In order that the bars 11 and 12 will be held in spaced relation with each other, connecting bars 20 are provided and secured to the bars 11 and 12 by means of bolts 19 and 21.

Supported above the table 5 is a movable clamp frame 22, to which the arms 23 are connected, the arms 23 having pivotal connection with bolts 24 that move in suitable guideways formed in the slides 25 disposed at the ends of the table 5. Arms 26 have their lower ends secured to the slides 25 and have their upper ends pivotally connected to the arms 23 at 27. The slides 25 slide through suitable openings formed in the table 5 and bars 8, arms 28 being provided for connecting the bar 11 and slides 25 whereby movement of the bar 11 will produce a relative vertical movement of the slides 25 to lift the clamp frame, whereby the clamp frame may be tilted to allow the side edges of the stationary members 28 of the clamps to rest on their side edges.

The clamp frame includes side members 29 and a central movable member 30 being formed with grooves 31 in which pins 32 car...
ried by the members 29 move. The movable clamping members 33 are carried by the movable member 30 which clamping members cooperate with the members 28 to grip articles therebetween. An operating handle 34 has connection with the member 30 to move the member 30 and cause the clamping members 33 to be moved to their active positions.

Arms 35 form a part of each member 28, and as shown, these arms are provided with elongated openings 36 in which the bolts 37 are positioned, whereby the members 28 may be adjusted vertically to provide a space between the members 28 and the bar 38 associated therewith, to receive end boards of an egg crate supplied with the usual clamps, thereby adapting the device for use in connection with egg case end boards of various types.

From the foregoing it will be obvious that due to the construction of the member 15 and manner of connecting the same to the bars 11 and 12, that the clamp frame, which is movable by the movement of the member 15, may be moved with the minimum amount of exertion on the part of the operator, due to the fact that the force employed for elevating the clamp bar is directed to the bars 11 and 12, centrally thereof, eliminating binding at either end of the bars 11 and 12.

I claim:

A box machine including a table, a vertically movable clamping frame supported above the table, a bar pivotally supported under the table, vertical slides at the ends of the table and connected with the clamping frame, arms arranged at the ends of the bar and having connection with the vertical slides for transmitting movement to the slides, an arm having its lower end secured intermediate the ends of the bar, said arm being disposed at an oblique angle with respect to the bar, and said arm adapted to be operated to move the bar and slides.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES K. ASHLEY.

Witnesses:

M. A. Dooson,
Emma E. Lyon.