UNITED STATES PATENT OFFICE.

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ADJUSTABLE MOLD-JACKET.


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To all whom it may concern:

Be it known that I, JOHN L. NUTE, a citizen of the United States, residing at Kennett Square, in the county of Chester and State of Pennsylvania, have invented a new and useful Adjustable Mold-Jacket, of which the following is a specification.

The device forming the subject matter of this application is an adjustable mold jacket, and one object of the invention to provide novel means for connecting the walls or plates of the jacket, adjustably at the corners, to permit a variation in the size of the jacket.

Another object of the invention is to provide novel means whereby the walls of the jacket, at the will of an operator, may be adjusted with respect to each other, so that the jacket has a tapered form.

It is within the province of the disclosure to improve generally and to enhance the utility of devices of that type to which the present invention appertains.

With the above 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 disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the drawings:

Figure 1 shows in side elevation, a jacket constructed in accordance with the present invention;

Fig. 2 is a top plan of the jacket;

Fig. 3 is a perspective view showing one of the constituent plates of the jacket;

Fig. 4 is a fragmental side elevation, showing the walls tilted to an intermediate position;

Fig. 5 is an elevation wherein the structure delineated in Fig. 4 is viewed at right angles to the showing of Fig. 4;

Fig. 6 is a plan showing a slight modification in the invention.

In carrying out the present invention there is provided, as an article of manufacture, a plate 1 having an extension 2 at one end, in which there is formed an opening 3. In the plate 1 near to the extension 2, spaced slots 4 and 5 are formed, there being an intermediate slot 6 in the plate, between the spaced slots 4 and 5. As indicated at 7, the opening 3 may be duplicated, and as indicated at 8, the slots 4, 5 and 6 may be duplicated, to permit an adjustment in the size of the jacket of which the plate 1 constitutes a part. The plate 1 is provided near that end which is remote from the slots 4, 5 and 6, with an outstanding lug 9 having an opening 10 in which is slidably mounted a rod or bolt 11, provided at its outer end with a head 12, and carrying at its inner end an adjusting device such as a nut 14. A compression spring 13 surrounds the bolt 11, one end of the compression spring abutting against the nut 14, and the other end of the compression spring abutting against the lug 9. That end of the plate 1 which is adjacent the lug 9 is supplied with spaced tongues 16 and 17, and with an intermediate tongue 18. The tongues 17, 18 and 16 on one plate, are adapted to be received loosely, in the openings 4, 6 and 5 of an adjoining plate to form a corner joint. A portion of the end edge of the plate 1 adjacent the tongue 16 is disposed, as shown at 19, at right angles to the longitudinal edge 20 of the plate 1. The remaining portion 21 of the said end edge of the plate is disposed at an acute angle to the longitudinal edge 20.

The inner edge 22 of the slot 5 is at right angles to the edge 20. The outer edge 23 of the slot 5 is disposed at an acute angle to the edge 20. The slot 5, therefore, tapers toward the longitudinal center of the plate 1. One part 24 of the inner edge of the slot 6 is disposed at right angles to the edge 20. The other part 25 of the inner edge of the slot 6 is disposed at an acute angle to the edge 20. One part 26 of the outer edge of the slot 6 is at right angles to the edge 20. The other part 27 of the outer edge of the slot 6 is disposed at an acute angle to the edge 20. The inner edge 28 of the slot 4 is inclined with respect to the edge 20, the outer edge 29 of the slot 4 being disposed at right angles to the edge 20. The slot 4, therefore, tapers inwardly toward the longitudinal center of the plate 1, and it may properly be stated that the slots 4 and 5 taper toward each other.

In practical operation, the tongues 16, 18 and 17 on the end of one plate are received, respectively, in the slots 5, 6 and 4 of an adjoining plate. The bolt 11 on one plate passes through the hole 3 in the adjoining
plate, and the head 12 engages the outer face of said adjoining plate. By adjusting the nut 14, the effort of the spring 16 may be varied, and the plates may be held together yieldingly, to form the corners of the jacket.

Suppose that it is desired to dispose the jacket in such a way that it has a common cross section from top to bottom, the inner surface of one plate bearing against the part 19 of the end edge of an adjoining plate. Then, as shown in Fig. 1, the outer edge of the tongue 17 bears against the edge 29 of the slot 4, a part of the outer edge of the tongue 18 bears against the portion 26 of the slot 6, a portion of the inner edge of the tongue 18 bearing against the part 24 of the slot 6, and the inner edge of the tongue 18 bearing against the edge 22 of the slot 5.

Let it be supposed that it is desired to give a taper to the jacket. Then the inner surface of one plate 1 bears against the portion 21 of the end edge of an adjoining plate. The inner edge of the tongue 17 cooperates with the inclined edge 28 of the slot 4, a portion of the inner edge of the tongue 18 cooperating with the part 25 of the slot 6, a portion of the outer edge of the tongue 18 cooperating with the part 27 of the slot 6, and the outer edge of the tongue 18 cooperating with the edge 23 of the slot 5.

Suppose that it is desired to give a pronounced taper than the one resulting from the operation above mentioned. Then the constituent adjoining plates of the jacket are disposed as shown in Figs. 4 and 5, the inner surface of one plate resting on the angle defined by the portions 19 and 21 of the end edge of an adjoining plate, as indicated in Fig. 4. Under such circumstances, the inner and outer edges of the tongue 17 are spaced from the walls 28 and 29 of the slot 4, as shown in Fig. 5, the inner and outer edges of the tongue 18 being spaced from the edges 22 and 23 of the slot 5, as shown in Fig. 5. The outer edge of the tongue 18 has a bearing on the angle defined by the edges 26 and 27 of the slot 6, and the inner edge of the tongue 18 has a bearing on the angle defined by the parts 25 and 24 of the said slot 6.

When it is desired to change the dimensions of the mold, the tongues may be shifted from the openings 5, 6 and 4, to the openings designated by the reference character 8 in Fig. 3.

It will be observed that the device forming the subject matter of this application not only includes a means whereby the walls of a jacket of this kind may be tilted, to give a varying taper to the jacket, but includes, also, means whereby the dimensions of the jacket may be changed to suit the work at hand.

In Fig. 6 of the drawings, wherein a modified form of the invention appears, the plate is denoted by the numeral 100 and is provided with a reinforcing rib 101 which is of looped form, the rib approximating in outline, the form of the letter L.

Having thus described the invention, what is claimed is:

1. A device of the class described comprising angular walls, one of which is provided with spaced slots and with an intermediate slot between the spaced slots, the other of which is provided with spaced tongues loosely received in the spaced slots, and with an intermediate tongue loosely received in the intermediate slot, the spaced slots tapering toward each other, and the intermediate slot tapering from its ends toward its central portion.

2. A device of the class described comprising angular walls, one of which is provided with a slot and with an opening located outwardly of the slot, the other of which is provided with a tongue received in the slot, and with an exterior lug; a rod slidably mounted in the lug and in the opening and having a head engaging the first specified wall; an adjusting device on the inner end of the rod; and a spring on the rod and interposed between the adjusting device and the lug.

3. As an article of manufacture, adapted to be used in the formation of a mold jacket, a plate provided at one end with a slot and having an opening located outwardly of the slot, the plate being provided at its other end with a tongue corresponding in size to the slot, and being provided with an outstanding lug located adjacent the tongue; a rod slideable in the lug and corresponding in diameter to the opening, the rod having a head at its outer end; an adjusting device on the inner end of the rod; and a spring interposed between the lug and the adjusting device.

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

JOHN L. NUTE.

Witnesses:
CHARLES H. PYLE,
JOHN J. CROZIER.

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