July 26, 1938. A. W. HAWES 2,125,239

WORKPIECE DRIVE FOR POWER SHAPING MACHINES

Filed March 29, 1937

Fig. 1

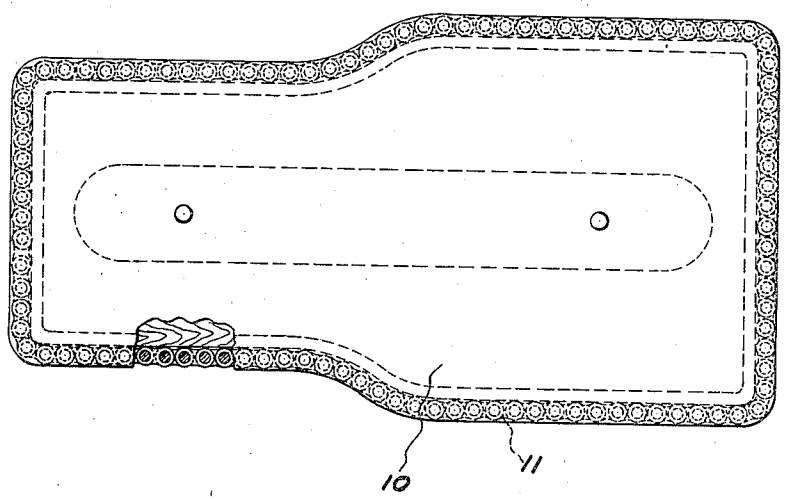


Fig. 2

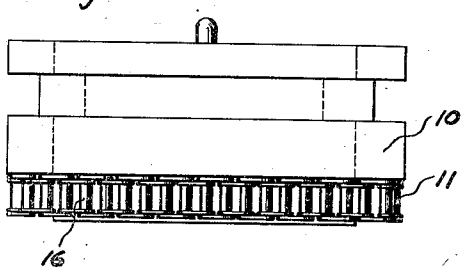


Fig. 3

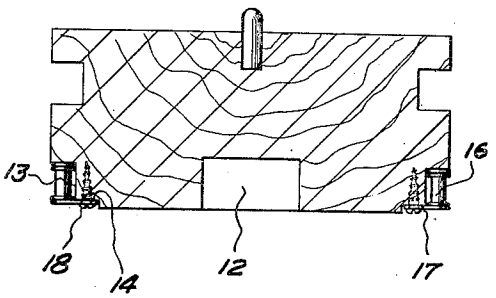
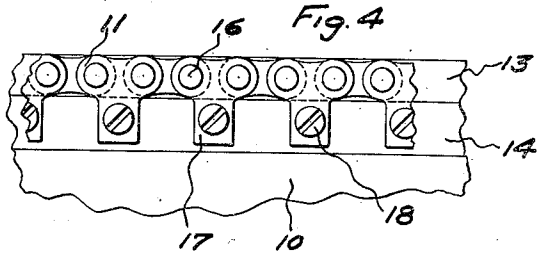


Fig. 4



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WORKPIECE DRIVE FOR POWER SHAPING MACHINES

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2 Claims. (Cl. 144—145)

This invention relates to power shaping machines for forming irregular work pieces usually of wood and relates more particularly to means for advancing the form carrying the work blank past the cutter.

A primary object of the invention is to provide an improved driving chain for forms on which work pieces are mounted for operation in a power shaping machine.

Another object of the invention is to provide an improved chain attaching means for a work piece form to rigidly retain the driving chain in position about the periphery of the form.

A feature of importance and by which the above named objects are attained is that alternate links along one side of the driving chain are provided with lateral extensions, each of these projections being integral with its link and secured directly to a surface of the form, and the chain preferably being mounted in a peripheral recess extending around the form.

With the above and other objects in view the invention may include the features of construction and operation set forth in the following specification and illustrated in the accompanying drawing.

In the accompanying drawing annexed hereto and forming a part of this specification, I have shown the invention embodied in a shaper form of generally rectangular and elongated form but it will be understood that the invention can be otherwise embodied and that the drawing is not to be construed as defining or limiting the scope of the invention, the claims appended to this specification being relied upon for that purpose.

In the drawing Fig. 1 is a complete plan view of a shaper form made in accordance with the present invention; Fig. 2 is an end elevation thereof; Fig. 3 is a vertical sectional view of the form shown in Figs. 1 and 2, and Fig. 4 is an enlarged plan view of a portion of the form and its driving chain.

In the above mentioned drawing, I have shown but one embodiment of the invention which is now deemed preferable, but it is to be understood that changes and modifications may be made within the scope of the appended claims without departing from the spirit of the invention.

Briefly, and in its preferred aspect, the invention may include the following principal parts: First, a form having the outline and size of the article desired to be reproduced; second, a link chain extending about the periphery thereof; third, projections formed on the links of said chain; and fourth, fastening means extending through said extensions and entering the body portion of said form.

Referring more in detail to the figures of the drawing, I provide a form 10 with a driving chain 11 extending completely about its periphery. The form 10 is of the type adapted for use in a machine such as shown in the patent to Sawyer 1,567,865 granted December 29, 1925. It is to be understood that the shape of the form will correspond to the shape of the article desired to be reproduced. The operation of the improved form in the shaping machine is similar in every way to the operation of the form in the above referred to patent. The form may be provided with a slot or recess 12 within its lower surface by means of which the form may be resiliently forced toward a cutter as in the above mentioned patent. The form also is provided with a peripheral recess 13 extending parallelly to the side walls of the form and adjacent its lower surface so that the recess completely encircles the form. Also adjacent the periphery is a shallow recess 14 of uniform depth formed in the lower surface completely about the periphery of the form.

Mounted within the peripheral recess 13 is the link chain 11 completely circling the form. The links of this chain substantially fill the recess 13 and provide equally spaced pins 16 for engagement with a sprocket wheel (not shown) in the usual manner for advancing the form 10 past the cutter.

For the purpose of securing the chain 11 to the form 10 projections 17 are formed on some of the links along one side of the chain 11. These projections 17 may be formed by lateral extensions integral with alternate links upon one side of the chain. Each of these projections 17 may be secured to the recessed portion of the lower surface of the form by means of screws 18. The shallow recess 14 formed in the lower surface of the form 10 is preferably of sufficient depth to position the chain 11 with its links slightly above the lower surface of the form so that the links or their projections 17 will not contact with a table of the machine on which the form may be placed for operation by a cutter.

I claim as my invention:

1. In a work piece form for power shaping machines, a body portion adapted to have a work blank secured thereto, said body portion having a recess extending completely about its periphery and extending adjacent and above its lower surface, a chain having flexibly connected links extending about said body portion and lying

within said recess, projections formed on some of the flexibly connected links of said chain along one side, and fastening means extending through said projections to secure said chain to said form.

2. A work piece form for power shaping machines, a body portion adapted to have a work blank secured thereto, said body portion having a recess extending about its periphery adjacent the lower surface thereof, a driving chain lying within said recess, said chaing having flexibly connected links some of which along one side are provided with integral laterally extending projections, and fastening means extending through said projections, said projections and their fastening means lying within said recess and above the lower surface of said form.

AUSTIN W. HAWES.