

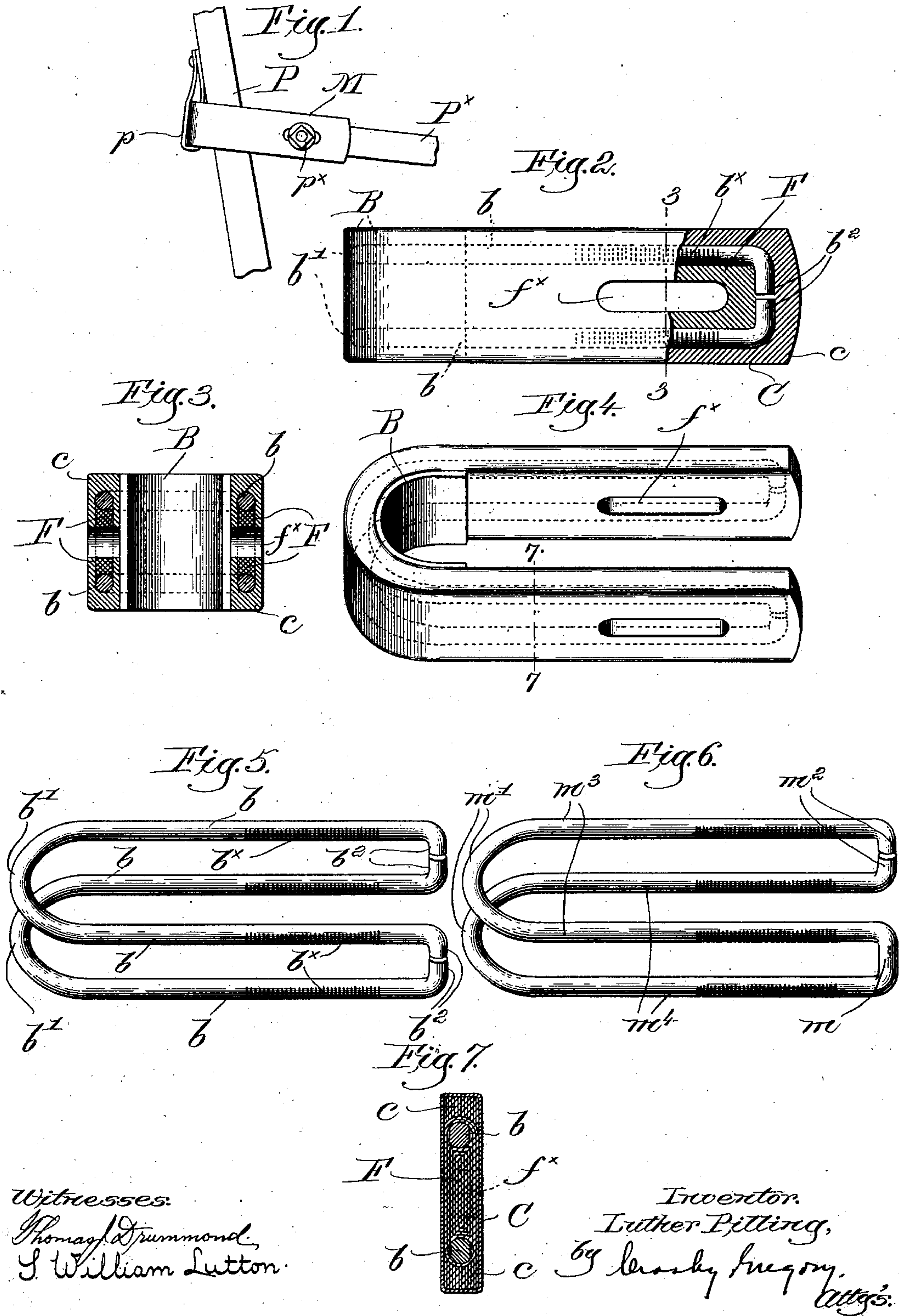
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L. PILLING.
LUG STRAP FOR LOOM PICKER STICKS.

APPLICATION FILED JULY 27, 1903.

NO MODEL.



Witnesses:

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LUG-STRAP FOR LOOM PICKER-STICKS.

SPECIFICATION forming part of Letters Patent No. 756,048, dated March 29, 1904.

Application filed July 27, 1903. Serial No. 167,118. (No model.)

To all whom it may concern:

Be it known that I, LUTHER PILLING, a citizen of the United States, and a resident of Danielson, county of Windham, State of Connecticut, have invented an Improvement in Lug-Straps for Loom Picker-Sticks, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention has for its object the production of a strong, durable, and effective lug-strap for loom picker-sticks and which can be easily and cheaply manufactured.

As is well known to those skilled in the art, the strain on the lug-strap caused by the movement of the picker-stick is very great, demanding a very strong and durable strap to stand up to the work, and heavy leather of good quality has been used. Leather is expensive, however, and various substitutes therefor have been devised with more or less success, it being manifest that inasmuch as the life of the usual lug-strap probably does not average over six weeks the cost must be brought down to a low figure.

In accordance with my present invention the lug-strap comprises a metallic skeleton body of loop form constructed of one or more rods, preferably round in cross-section, provided with a non-metallic filling of textile material, leather, &c., and an inclosing casing which binds the skeleton body and filling firmly together.

The various novel features of my invention will be fully described in the subjoined specification, and particularly pointed out in the following claims.

Figure 1 is a side elevation of a lug-strap embodying one form of my invention shown in connection with part of a picker-stick and connected to the picker rod or strap. Fig. 2 is an enlarged side elevation and partial section of the lug-strap shown in Fig. 1. Fig. 3 is a transverse section thereof on the line 3-3, Fig. 2, looking toward the left. Fig. 4 is a perspective view of the lug-strap, showing in dotted lines the skeleton body thereof. Fig. 5 is a perspective view of the skeleton body in the preferred form. Fig. 6 is a simi-

lar view of a modified form of body; and Fig. 7 is a greatly-enlarged section through one side of the lug-strap on the line 7-7, Fig. 4.

In order that the lug-strap may possess sufficient elasticity to operate properly and at the same time be strong and durable, I provide a metallic body made in skeleton form, thereby combining strength and light weight with cheapness of construction, and such skeleton body is embedded or inclosed within suitable and durable non-metallic material, such as strong cloth or ticking or other fibrous material. This filling provides the requisite backing or support to sustain the body in shape, and such filling and body are firmly united or bound together by an enveloping case.

Referring to Fig. 1, the picker-stick P, having a loop *p* to support the lug-strap, and the picking rod or strap P^x, attached to the lug-strap by a bolt *p*^x, may be and are of usual construction and form no part of my present invention, a lug-strap M, embodying one form of my present invention, being shown in coöperative relation with the parts referred to.

In carrying out my invention I make a skeleton metallic body, one form of which is shown separately in Fig. 5. This body is made of two stout metal rods or wires, preferably round in cross-section, each bent into elongated U shape to present straight sides *b*, connected by a curved back *b'*, the extremities of the wire being bent at right angles to the sides at *b*² and in parallelism with each other. The two parts of the body are arranged so that the main or looped portions thereof are in parallel planes with the bent ends *b*², inturned toward each other, and they may be fastened together or not, as desired. Such skeleton body has open sides and back, as will be obvious, and in the open portion I insert a filling F of non-metallic material. The filling is conveniently made by folding or wrapping strong cloth, canvas, or ticking into strip form with cement between contacting faces and of such thickness that when compressed it will be equal to the diameter of the rods *b*. The filling-strip is bent into a loop and inserted between the top and bottom members

of the skeleton body, filling the open sides and back thereof, and while soft and "green" is subjected to heavy pressure in suitable dies. This reduces the filling to the requisite thickness and causes the contiguous portions of the rods or wires of the body to embed themselves in the filling, as clearly shown in Figs. 3 and 7. A binding and inclosing case or envelop is then made by wrapping the assembled body and filling with textile material, as *c*, cemented together and compressed, the case protecting and inclosing the sides and outer portions of the body, as shown in Figs. 2, 3, and 7, and binding body and filling firmly together. This case may form the cover of the lug-strap, or, if desired, a cover of ticking or other fabric *C* may be applied. In order to prevent the case or envelop *c* from slipping or becoming displaced longitudinally, I prefer to provide the portions *b* of the body with corrugations *b*^x on the inner and outer faces thereof to grip the case or envelop when applied to the filled body. A lug-strap so constructed possesses the proper elasticity and strength, is very durable, and is easily and cheaply constructed.

Apertures *f*^x are made in the filling and envelop in the sides of the lug-strap to receive the bolt or other device *p*^x, by which it is attached to the picking strap or rod.

The bent ends *b*² of the metallic body strengthen the ends of the lug-strap and support the filling *F* thereat, preventing its longitudinal displacement relatively to the body. An elastic buffer or cushion *B*, of leather or other suitable material, is cemented or otherwise secured in the bend or back of the strap.

Instead of making the filling *F* as described it may be made of leather, leather-scrap cemented together, or other suitable fibrous material.

I have found it somewhat easier and cheaper to construct the skeleton body, as shown in Fig. 5, composed of two like parts, and it is not necessary to connect the ends of the bends *b*²; but I can make the body from a single rod or piece of wire, as shown in Fig. 6. Referring thereto, the wire would be bent at *m* into a loop substantially twice the length of the finished body, and then the extremities would be inturned, as at *m*². This elongated and practically closed loop would then be bent at *m*¹ into the form shown in Fig. 6, the upper straight sides *m*³ lying in a plane parallel to a plane passed through the lower straight sides *m*⁴. The lug-strap would be completed in the manner hereinbefore set forth.

By the skeleton structure of the body I am enabled to secure the desired thickness of the metal for rigidity and durability without improper weight, and by making the body from rod or wire like material there is no waste in its construction.

My invention is not restricted to the precise construction and arrangement herein

shown and described, as the same may be modified or rearranged in various particulars by those skilled in the art without departing from the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped, metallic skeleton body having open sides, a non-metallic filling inserted in the open sides and extending around the back of the body, and an inclosing case binding body and filling together.

2. A lug-strap for loom picker-sticks, consisting of one or more metallic rods bent to form an elongated U-shaped skeleton body having open sides, a non-metallic filling inserted in the open sides and extending around the back of the body, and in which the contiguous parts of the body are embedded, and an inclosing case binding body and filling together.

3. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped, metallic skeleton body having open sides, a compressed, non-metallic filling inserted in the open sides and extending around the back of the body, and an inclosing case enveloping the body and filling.

4. A lug-strap for loom picker-sticks, consisting of an elongated, U-shaped, metallic skeleton body having open sides, a non-metallic filling inserted in the open sides and extending around the back of the body, said filling being apertured near the front ends thereof, and a case enveloping the body and filling and apertured to register with the apertures in the filling.

5. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped metallic body having open sides and back, a non-metallic filling inserted in such open portion of the body, and means to bind the body and filling firmly together.

6. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped metallic body having open sides and back, a compressed non-metallic filling inserted in such open portion of the body and partly embedding the contiguous portions of the latter, and means to bind the body and filling firmly together.

7. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped metallic skeleton body presenting open sides and back, a filling of compressed fibrous material inserted in such open portions of the body and in which contiguous edges of the latter are partly embedded, and an inclosing casing binding the body and filling together.

8. A lug-strap for loom picker-sticks, comprising a skeleton body consisting of two U-shaped metallic rods having their extremities bent substantially at right angles to the sides, the main portions of the rods being in parallel planes with their bent ends turned toward

each other, a non-metallic filling inserted between the rods and extending around the sides and back of the body, and an inclosing case enveloping and binding the body and filling firmly together.

9. A lug-strap for loom picker-sticks, comprising a metallic wire skeleton body of elongated U shape having open sides and back, a U-shaped filling of compressed fibrous material inserted in the said open portion of the body, and a case wrapped around the body and filling and binding the same firmly together.

10. A lug-strap for loom picker-sticks, consisting of an elongated U-shaped, metallic skeleton body having open sides, a non-metallic filling inserted in the open sides and extending around the back of the body, and an

inclosing case binding body and filling together, the sides of the body being corrugated on their inner and outer faces to engage and hold the case from movement longitudinally of said body.

11. A lug-strap for loom picker-sticks, consisting of an elongated loop of non-metallic material, and a metallic skeleton body embedded therein and having open portions in its sides filled by said non-metallic material.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LUTHER PILLING.

Witnesses:

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