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EXPANSION TWINE HARNESS

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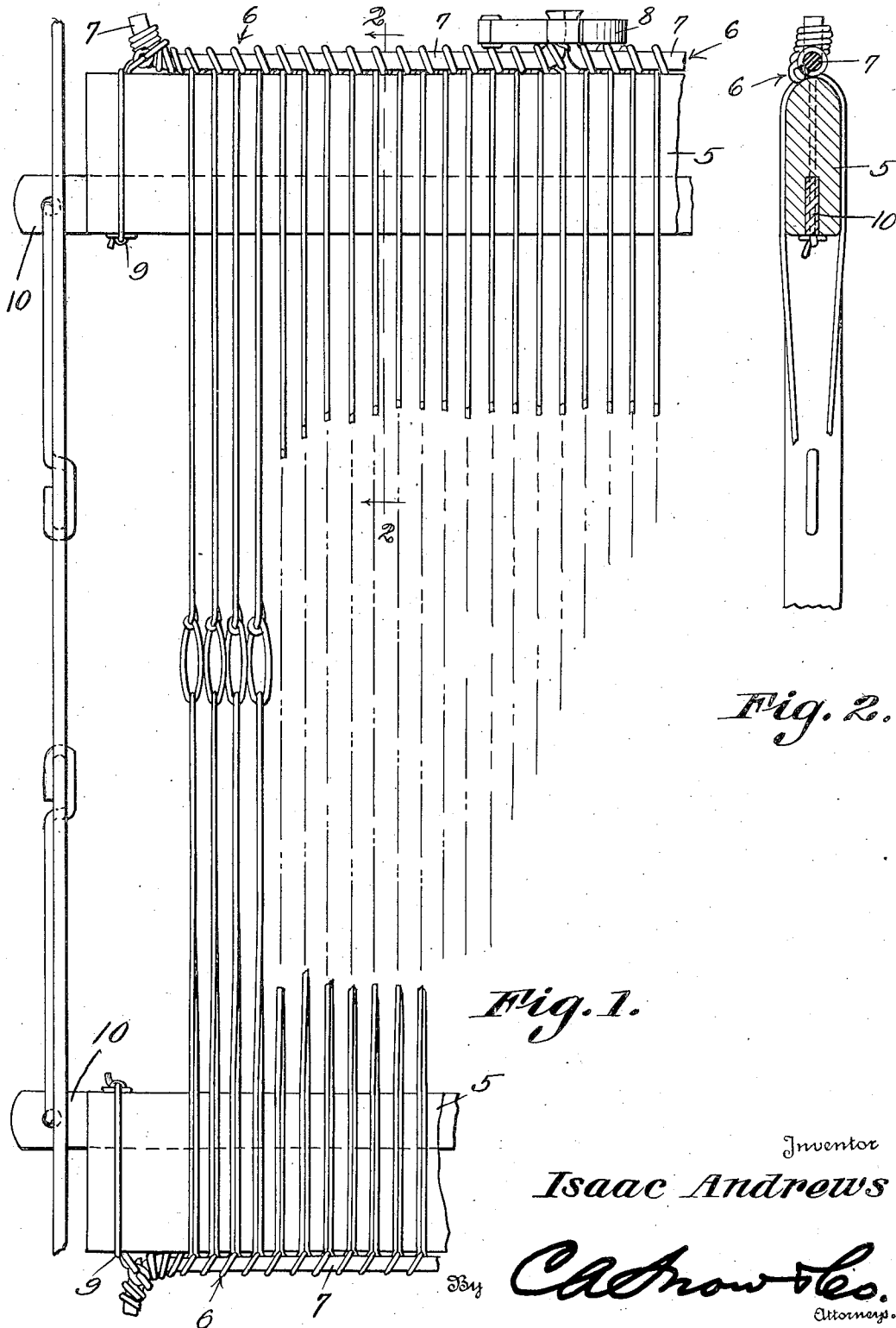


Fig. 2.

Fig. 1.

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EXPANSION TWINE HARNESS

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2 Claims. (Cl. 139—91)

In the cloth weaving industry, it is necessary to replace the twine harness, in the manufacture of various grades of cloth, that is, cloth varying in the number of threads per square inch, making it necessary for the manufacturer to stock a great number of harnesses having specific counts or a specific number of eyes per inch which can only be used in weaving cloth requiring that particular count.

It is therefore the primary object of the invention to provide an expansion sectional twine harness wherein the number of heddle eyes per inch may be varied by merely expanding or contracting the harness to meet the requirement, thereby eliminating the necessity of replacing the entire harness with a harness having the required number of heddles for a particular type of weaving, reducing the cost of manufacture to a minimum.

Another object of the invention is to provide a sectional twine harness whereby the length of the harness may be varied, novel means being provided for securing the ends of the sections in such a way that they will be held in exact alignment with each other during the weaving operation.

With the foregoing and other objects in view which will appear as the description proceeds, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims, it being understood that changes may be made in the construction and arrangement of parts without departing from the spirit of the invention as claimed.

In said drawing:

Figure 1 is an elevational view of a sectional twine heddle harness, constructed in accordance with the invention.

Figure 2 is a sectional view taken on line 2—2 of Figure 1.

Referring to the drawing in detail, the reference character 5 designates the upper and lower shafts of a twine harness, which shafts are of the usual and well known constructions, providing the support for the twine heddles.

The harness is made up of a plurality of twine heddle sections 6, the heddles being knit in the usual manner and supplied with an elastic strip 7 at each end thereof, the elastic strips being of lengths slightly longer than the lengths of the heddle sections, so that the ends of the elastic strips of adjacent sections may be brought together and secured, when the desired number of heddle sections have been mounted on the shafts 5, thereby holding the heddle sections in such a way that a continuous heddle is provided.

The ends of the heddle sections are secured by means of the clamps 8 which form the subject matter of a separate application, and which are of constructions so that they will lie parallel with the shafts 5 of the loom harness, thereby eliminating any interference in the weaving operation, caused by the clamps moving to positions at right angles to the shafts 5.

In the present disclosure, the heddle sections are shown as mounted on the shafts 5 of a twine harness, the shafts having longitudinal grooves in the inner edges thereof that accommodate the metal bars 10 of the usual metal heddle harness frame, thereby making it possible to use the expansible twine heddle sections with the well known metallic harness frame in common use.

From the foregoing it will be seen that due to the construction shown and described, a loom harness embodying heddle sections constructed in this manner may be readily adjusted by stretching or contracting the heddle sections longitudinally of the shafts 5 thereby reducing or increasing the number of heddles per inch, to the end that various grades of cloth may be woven without the necessity of replacing the twine harness.

It will further be seen that additional sections may be added, or sections may be removed, to meet various requirements of use.

The outer ends of the heddle sections at the ends of the harness, are secured against movement longitudinally of the shafts, by means of the fasteners indicated by the reference character 9.

Having thus described the invention, what is claimed is:

1. A twine harness for looms, comprising shafts, a sectional twine heddle mounted on the shafts, each section including upper and lower elastic strips to which the twine of the heddle is connected, the ends of the elastic strips extending beyond the side edges of the twine sections and adapted to be extended at right angles, and clamping members adapted to clamp the right angled ends of adjacent heddle sections together.

2. A twine harness for looms, comprising shafts, a sectional twine heddle mounted on the shafts, each section including an upper and lower elastic strip to which the twine of the heddle is secured, the ends of the elastic strips adapted to be extended at right angles, and clamps adapted to grip the right angled ends of the elastic strips of adjacent heddle sections, securing the sections together.

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