

(No Model.)

H. F. BARROWS.

ROLLER CHAIN.

No. 277,976.

Patented May 22, 1883.

Fig. 1.

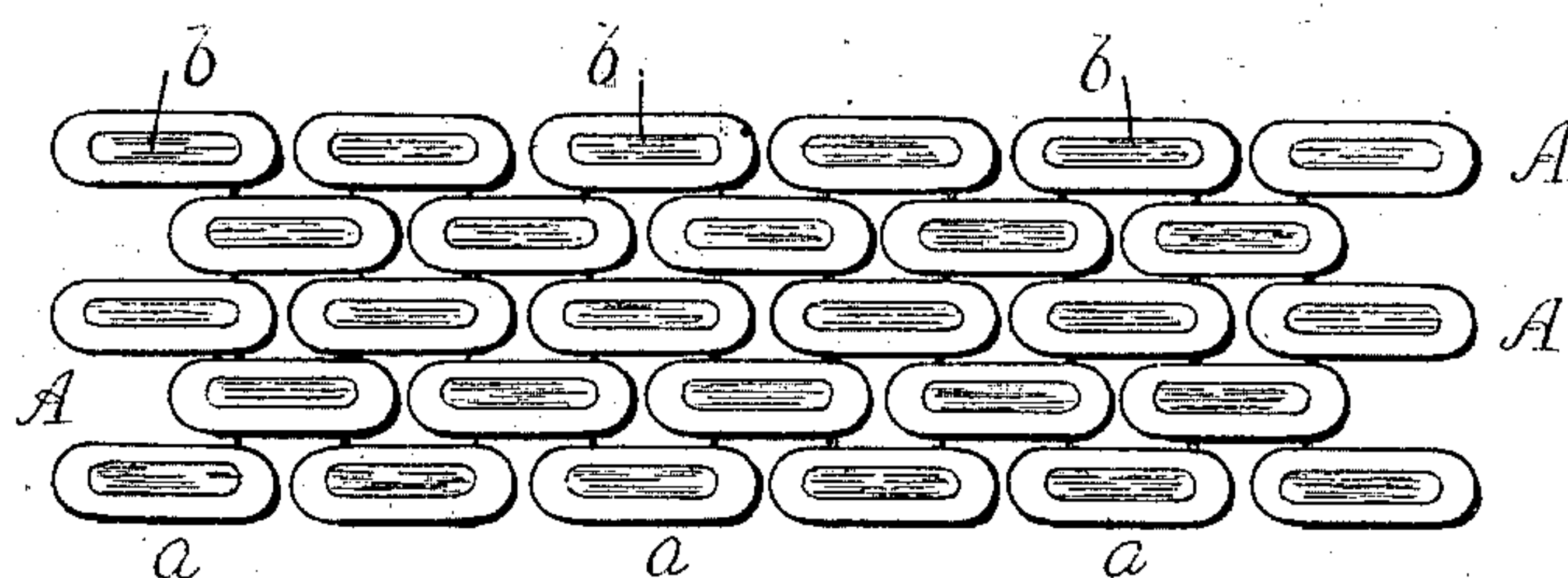
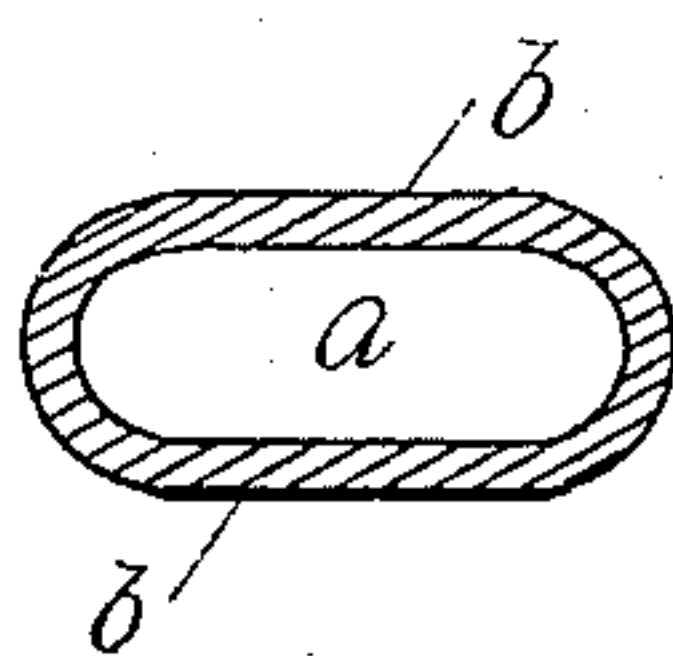


Fig. 2.



enlarged.

Witnesses.

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HENRY F. BARROWS, OF ATTLEBOROUGH, MASSACHUSETTS.

ROLLER-CHAIN.

SPECIFICATION forming part of Letters Patent No. 277,976, dated May 22, 1883.

Application filed March 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY FRANCIS BARROWS, a citizen of the United States, residing at Attleborough, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Roller-Chains; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to a class of chains to be used mainly in the manufacture of bracelets, known as "roller-chains," in which a flat band of the desired width is made up of an assemblage of circular rings or links arranged in straight parallel rows longitudinally of the band, the links of one row alternating with those of the next, in order that the spaces between the links of one row may be lapped by the links of the next adjacent row, the entire band being bound together by wires passing through the interlocking links, the construction of the band being such that the fastening-wires are secured in place without the use of solder, by which the expense of such soldering and the discoloration of the metal, due to it, are avoided.

A prominent example of the class of bracelets to which my present improvements pertain is shown in Letters Patent of the United States, issued on the 7th day of November, 1871, to George W. Clappitt. Heretofore the links of the chains have been left loose upon the binding-wire, so as to turn or roll upon the latter, hence the term "roller-chains."

In my present chain I flatten the links to an oblong form, so that they cannot turn upon the binding-wires, this being incidental to the main feature of my invention, which consists in forming flat facets upon the sides of each link, said facets being concentric with the sides of said link, and the latter being rounded at the corners, all combining to produce a novel and striking effect in the ornamental appearance of the chain. If the links were

round they would change in position, and the facets would become disarranged. Hence I flatten the links sufficiently to prevent turning upon the wires, thereby confining the facets in a uniform plane.

The drawings accompanying this specification represent, in Figure 1, a view of a chain containing my improvements, while Fig. 2 is a view of one of its links in cross-section.

In these drawings, A A, &c., represent the longitudinal rows of assembled links arranged and united as herein first premised, the individual links of such rows being shown at a a, &c.

In carrying out my improvement I form upon opposite sides of each link a flat facet, b, these facets in aggregate adding very greatly to the ornamental appearance, as for one thing they receive and reflect rays of light, which a round surface does not.

As it is essential that the facets b shall remain in a uniform plane, I flatten the links to an oblong form, as shown in Fig. 2 of the drawings, by which they are prevented from rolling upon the supporting-wires.

The links may be singly flattened and the facets formed upon them before they are made up into a chain. A preferable method, however, is to first make up the chain and then pass it between rollers, swages, or dies under pressure, the links being flattened and the facets formed in such passage, and the rolls (if rolls are used) may be grooved to receive the chain, the shoulders of the grooves preventing lateral distention of the chain.

I claim—

1. A chain consisting of links, each of which has on two opposite sides flat facets, which are concentric therewith.

2. A chain consisting of oblong links, each of which has flat facets on its oblong sides, said facets being concentric with said sides.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY FRANCIS BARROWS.

Witnesses:

H. E. LODGE,
F. CURTIS.