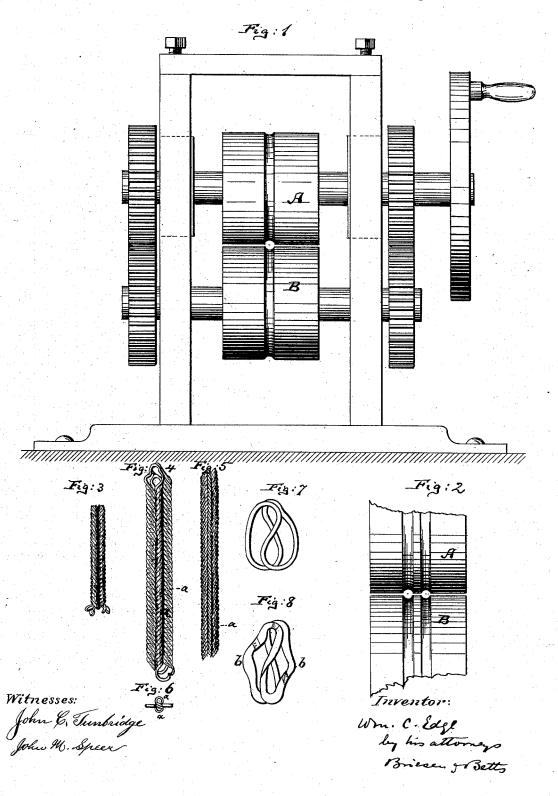
W. C. EDGE. WATCH CHAIN.

No. 263,691...

Patented Sept. 5, 1882.



## UNITED STATES PATENT OFFICE.

WILLIAM C. EDGE, OF NEWARK, NEW JERSEY.

## WATCH-CHAIN.

SPECIFICATION forming part of Letters Patent No. 263,691, dated September 5, 1882.

Application filed March 13, 1882. (No model.)

To all whom it may concern:

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Be it known that I, WILLIAM C. EDGE, of Newark, county of Essex, and State of New Jersey, have invented a new Improvement in Watch-Chains, of which the following is a specification.

Figure 1 represents a front elevation of a machine for shaping the watch-chain according to my invention. Fig. 2 is a face view of a modification of the rollers. Fig. 3 shows an ordinary fox-tail chain. Figs. 4 and 5 are side views of my improved watch-chain. Fig. 6 is an end view of the same. Fig. 7 is a perspective view of a link of the chain shown in Fig. 3, and Fig. 8 a perspective view of the link of my improved chain which is shown in Figs. 4 and 5.

This invention has for its object to make out of an ordinary fox-tail chain a flat chain having a projecting rib on each side. A fox-tail chain is one made out of **U**-shaped links. Each link is first straight and pushed through the upwardly-projecting loops of two connected bent links, and its ends are then bent upward to receive further straight links through them, the chain being thus built up of the links of the kind shown in Fig. 7. My endeavor is to produce a chain composed solely of such links, which chain shall have ribs on the faces, as indicated at aa, in Figs. 4, 5, and 6, and which chain shall otherwise be quite flat.

To this end I take the ordinary fox-tail shown in Fig. 3, which is composed of links 35 like that shown in Fig. 7, and introduce it between the grooved rollers A and B, (see Fig. 1,) which will compress the fox-tail chain, but leave a projecting rib on each face; or there may be more than one groove in each of the 40 rollers, as in Fig. 2, in which case there will be more than one projecting rib on each face.

The result of the pressure on each link will be to transform it from the outline shown in Fig. 7 to that shown in Fig. 8—namely, to press its ends flat together and render them practically 45 flat, and to bend out its middle portion to form there the projecting bulges b, which in the completed chain produce the ribs a, said ribs being made up of diagonally-placed sections of liuks.

I am well aware that it is not new to shape a continuous bar so as to leave a rib or ribs on its face or faces by passing it through rollers such as are shown in Figs. 1 and 2, and I do not claim anything in the process of treat- 55 ing known substances by such rollers; but, to my knowledge, a flexibly-jointed chain for ornamental or other purpose has never been produced out of links flat and with projecting ribs. Such a flat chain, when produced in ac- 60 cordance with the foregoing specification, is very flexible, is much more easily cleaned than the ordinary fox-tail chain, which has deep recesses or grooves in its faces in which the dirt will settle to such an extent as to render the 65 cleaning of the chain practically impossible; but when the fox-tail chain has been pressed according to my invention all recesses disappear, and the rounded wire links present flattened faces on the outside, and in every re- 70 spect the appearance and the utility of the chain are thus increased.

I claim-

A chain composed solely of links that have bulging-out portions b b, said chain being flat 75 throughout, with the exception of projecting ribs a a on its face, substantially as herein shown and described.

WILLIAM C. EDGE.

Witnesses:
WILLY G. E. SCHULTZ,
HARRY M. TURK,