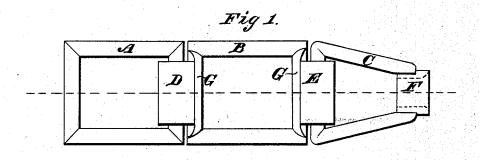
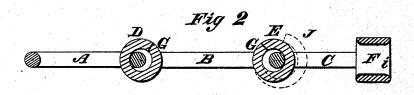
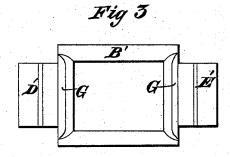
# P. Anderson.

### Chain for Water Elevators. Patented May 2, 1865. Nº47,595.







WITNESSES:

INVENTOR:

Shellon Smith & Anderson

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## United States Patent Office.

PHILANDER ANDERSON, OF EAST AVON, NEW YORK, ASSIGNOR TO HIM-SELF AND P. K. BRONSON, OF SAME PLACE.

### CHAIN FOR WATER-ELEVATORS.

Specification forming part of Letters Patent No. 47,595, dated May 2, 1865.

To all whom it may concern:

Be it known that I, PHILANDER ANDERSON, of Avon, in the county of Livingston and State of New York, have invented certain Improvements in the Construction of Chains for Water-Elevators and for other Purposes; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a plan of my invention. Fig. 2 is a section taken in the plane indicated by the red line in Fig. 1. Fig. 3 is a plan of the coupling-link B detached, and showing the coupling-lips D and E open, as they are cast.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to that class of chains known as "square-link" or "flat" chains, and which are used on water-elevators having self dumping buckets; and it consists in providing a very strong and durable article for such purposes at much less cost than the frail chains heretofore used therefor, and which latter very soon rust out, if they do not break.

To enable others to work my invention, I

will describe it in detail.

Every alternate link, A, in the chain is a parallelogram, its section being round, oval, or flat, as may be desired, and every other one, B, may be the same shape, but is pro-

vided at each end with curved lips or clasps D and E, which are cast partially open, as indicated by the dotted lines J in Fig. 2, by setting a core in the molds to form the circle to receive the links A. Fig. 3 shows this link as it comes from the foundry, its clasps D and E being open; but as they are made malleable their open edge is readily made to impinge upon the shoulders G when closing up the chain, as seen in Figs. 1 and 2.

The chain is connected to the rope of the windlass by means of the swivel C, the head F of which is also cast with a core of proper shape to produce a round edge, as seen at *i* in Fig. 2. This prevents the swivel from cutting the rope off, which defect has been so troublesome heretofore. The link B may be made with but one clasp, the other end being plain, and in this case the links forming the

chain would all be the same.

What I claim as my invention, and desire

to secure by Letters Patent, is-

As an improved article of manufacture, the malleable-iron square or flat link chain, the links and swivel being constructed and connected in the manner shown, and for the purposes specified.

#### PHILANDER ANDERSON.

Witnesses:

H. B. LEWIS, N. T. LEONARD, JONATHAN BAKER.