

(No Model.)

C. E. HART & C. A. TAPLIN.  
DRIVE CHAIN.

No. 476,201.

Patented May 31, 1892.

Fig. 1.

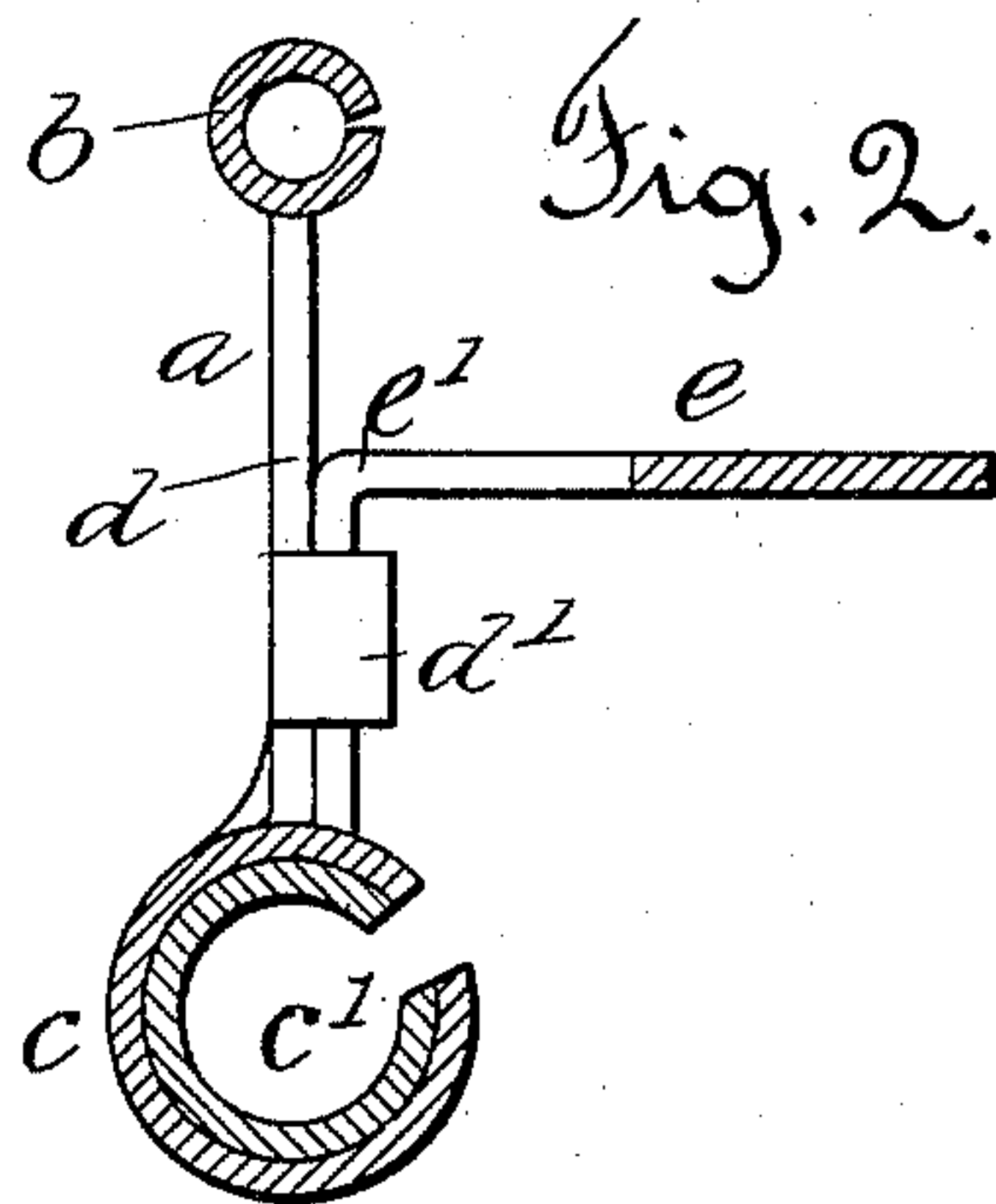
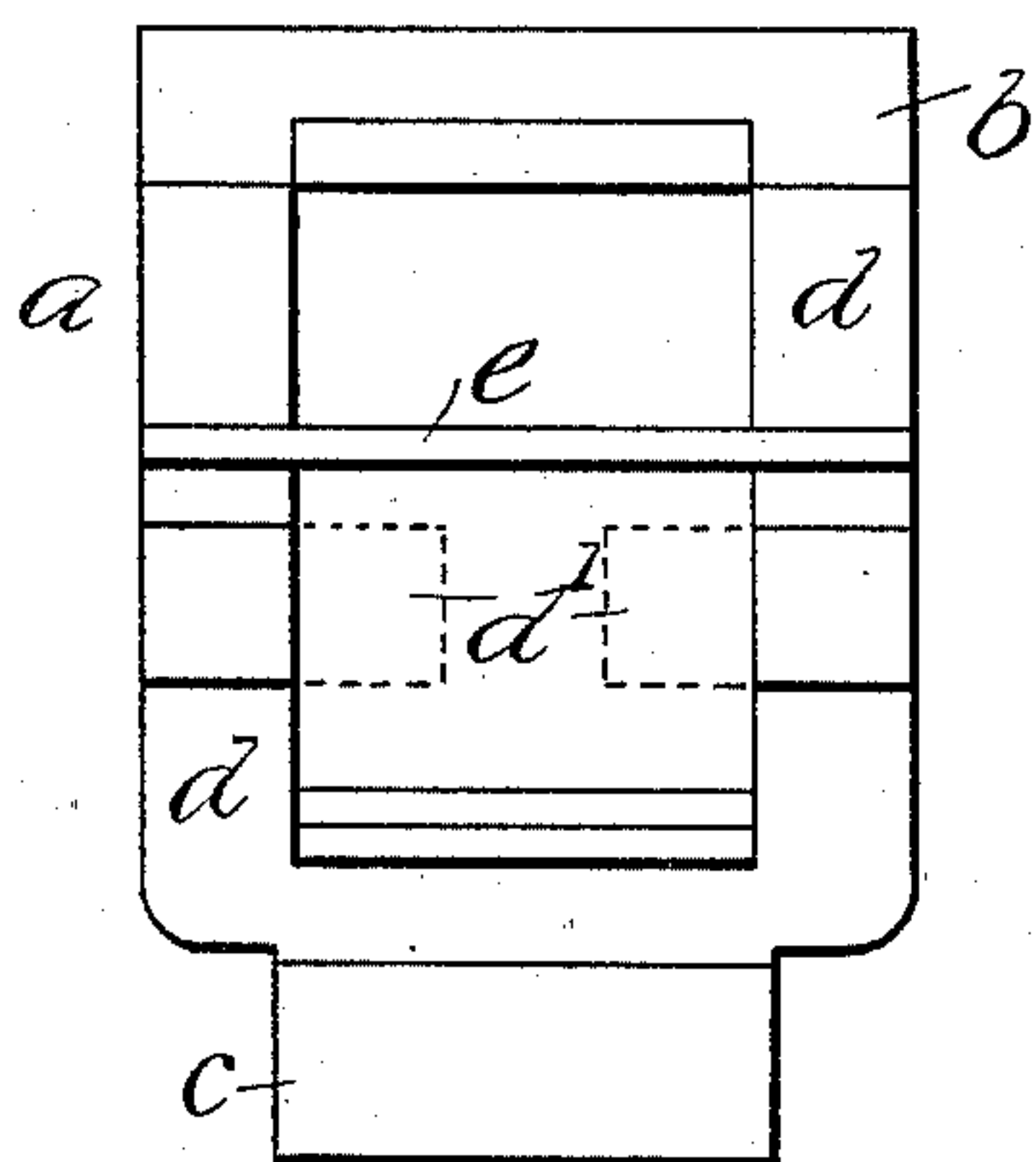
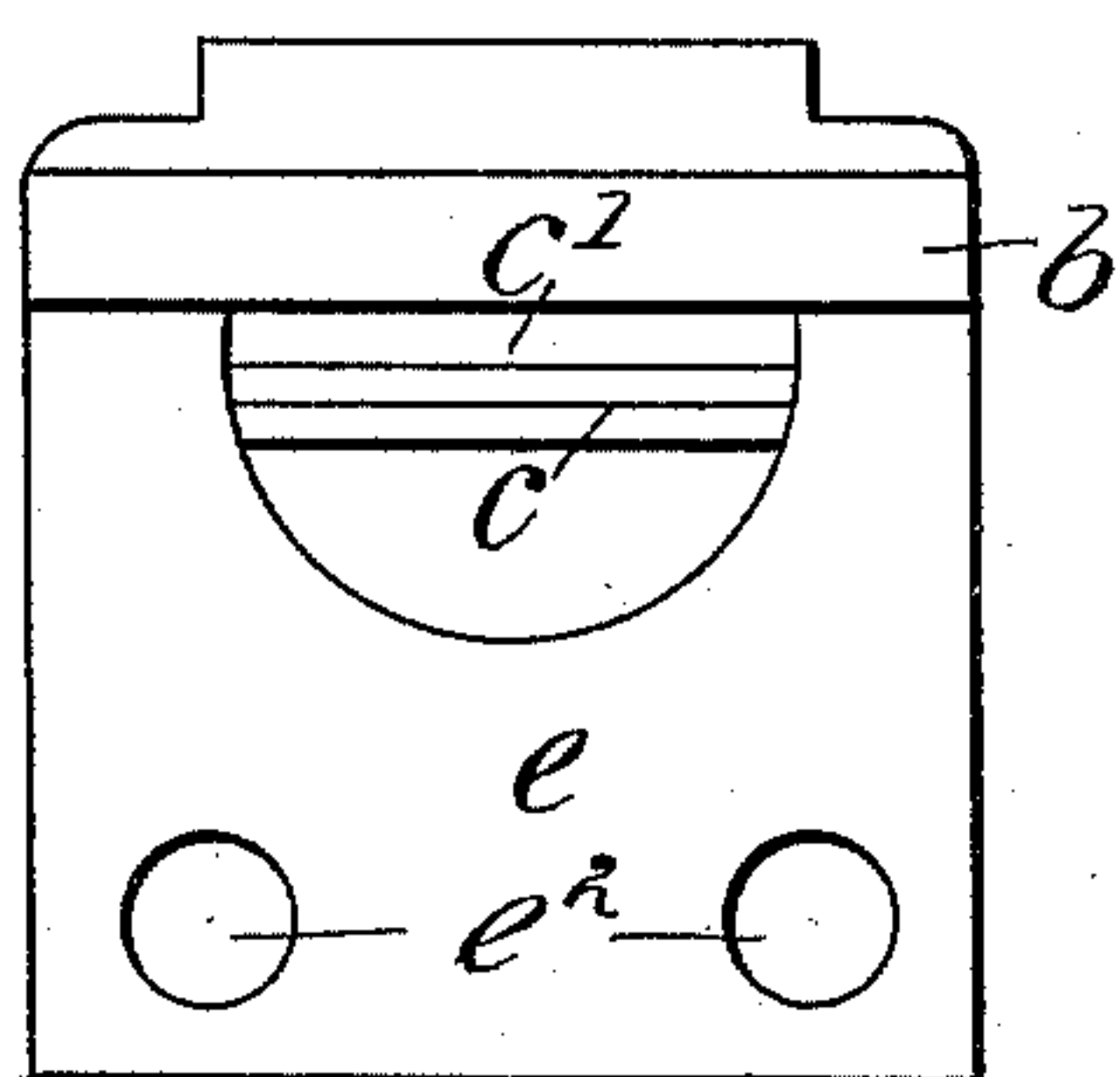


Fig. 3.



Witnesses  
H. A. Liddings  
G. B. Jenkins,

Inventors  
Charles E. Hart  
Clarence A. Taplin  
by *Chas. L. Rudett*  
attorney.

# UNITED STATES PATENT OFFICE.

CHARLES E. HART AND CLARENCE A. TAPLIN, OF NEW BRITAIN, CONNECTICUT, ASSIGNORS TO THE STANLEY WORKS, OF SAME PLACE.

## DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 476,201, dated May 31, 1892.

Application filed February 29, 1892. Serial No. 423,164. (No model.)

*To all whom it may concern:*

Be it known that we, CHARLES E. HART and CLARENCE A. TAPLIN, both of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Bracket-Arm Chain-Links, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make and use the same.

Our invention relates to the general class of drive-chains that are made up of a series of separable links, the several links being united by interengaging parts that are locked against any separation when the links are in the normal position for use; and the object of our invention is to provide a link of this class that has, among other features, a bracket-arm or like means of supporting parts or devices that are frequently attached to such chains.

To this end our invention consists in the details of the several parts making up the drive-chain link; and in their combination, as more particularly hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a detail front view of the improved link. Fig. 2 is a detail view in section through the link on a plane at right angles to the body part. Fig. 3 is a detail top view of the link.

In the accompanying drawings the letter *a* denotes the main part of the link, comprising the open frame having at one end a pintle *b* and at the other end a knuckle *c*. This frame is preferably cut or stamped from sheet metal of a suitable thickness to endure the tensile strain on the several parts to which they are subjected, and the pintle is formed by rolling up the metal at one end into a cylindrical or tubular form and curling up the knuckle *c* at the other end of the frame in such manner as to form a pintle-socket *c'*, that is open on the ends and near the front side.

On the side parts *d* of the frame there are formed integral projections cut from the substance of the metal and forming clips *d'*, that are used to clamp the bracket *e* firmly to the frame-work, the clips being located just under the bend *e'* of the bracket and folded about the upright side parts.

This bracket comprises a part that projects substantially at right angles to the link and another part that conforms in outline to the knuckle and forms, in fact, a reinforcement of the knuckle, being formed of two layers of metal rolled one within the other, as clearly shown in the sectional view in Fig. 2 of the drawings. The central part of the bracket is cut away, so that it conforms to and practically overlies the side parts of the frame, where it extends along and lies closely against such side parts. The projecting part of the bracket is usually provided with holes *e<sup>2</sup>*, through which bolts or other attaching means may pass for the purpose of securing any device to the link. Such links come into use in the making of drive-chains that are adapted to support elevator-buckets or other structures that are used for containing grain or the like that may be lifted by such chains.

The part *e* of the link that has been termed herein the "bracket" may be made without the projecting part or arm, and forms then a supplemental layer that, having a part extending within the knuckle, reinforces it and enables it to be made up of the two layers of metal rolled one within the other.

Our invention contemplates the making of a link with the part *e* comprising simply the supplemental or reinforcing part. In either case an integral clip may be formed on either the main section or the supplemental section of the blank.

We claim as our invention—

1. The improved drive-chain link comprising an open frame with pintle end and knuckle end and the supplemental frame secured to the main frame by integral clips formed on the one part and bent down upon the other, the pintle in said link being formed at one end of the main part and the knuckle at the opposite end and of the two thicknesses of metal rolled one within the other, all substantially as described.

2. The improved drive-chain link comprising an open frame with pintle end and knuckle end a supplemental frame secured to the side parts of the main frame, with a portion extending along said side parts and provided with a bracket-arm, and the integral



clips, whereby the two parts of the frame are secured together, all substantially as described.

3. The improved drive-chain link comprising  
5 ing an open frame having integral clips on the side parts and a bracket part secured to the frame by said clips and having an arm projecting over the body of the link, the pintle formed at one end of the main part and the knuckle

formed of a double thickness of metal, one part being rolled within the other, all substantially as described.

CHARLES E. HART.  
CLARENCE A. TAPLIN.

Witnesses:

G. L. REYNOLDS,  
G. L. VANNAIS.