

(No Model.)

W. H. HART.
DRIVE CHAIN.

No. 504,494.

Patented Sept. 5, 1893.

Fig. 1.

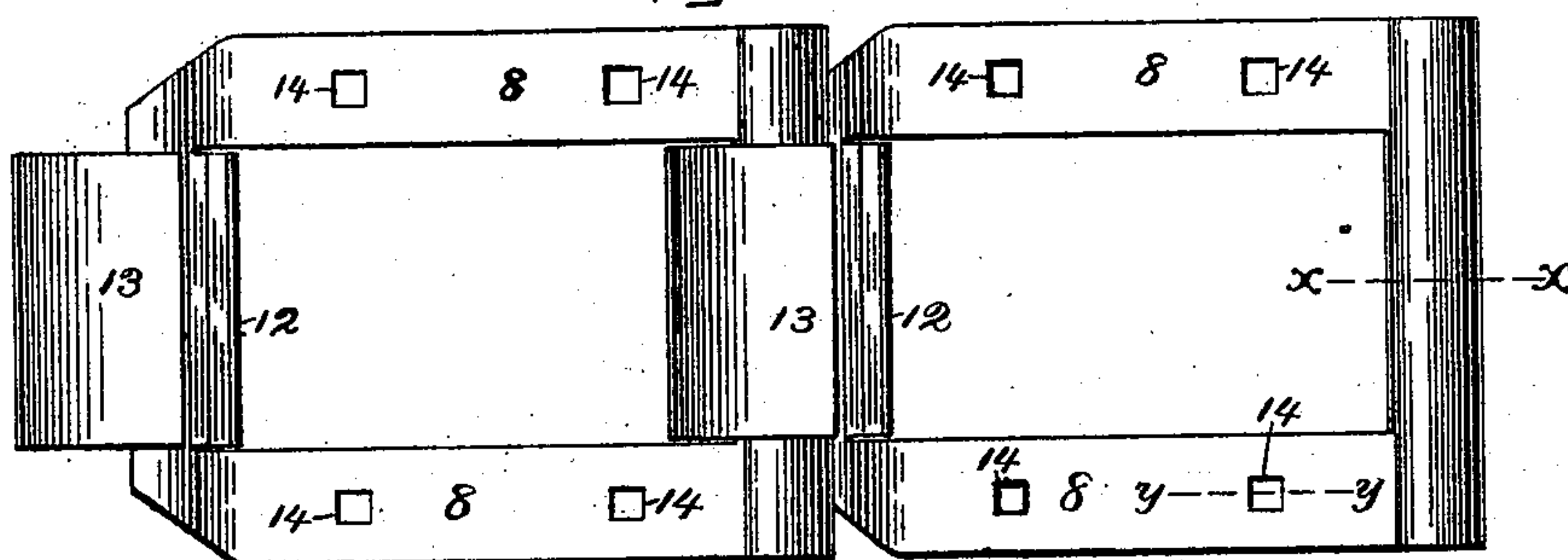


Fig. 2.

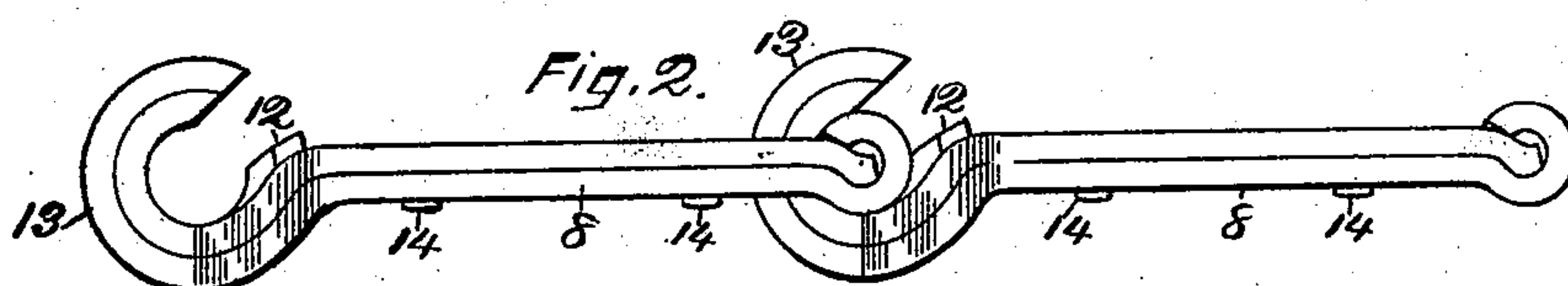


Fig. 3.

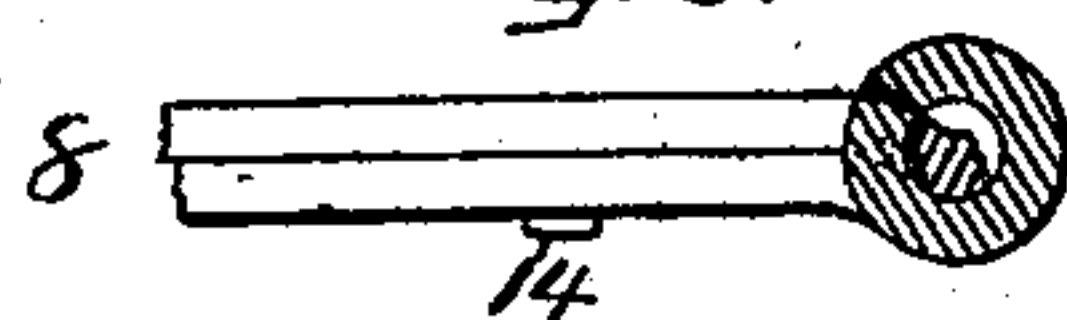


Fig. 4.



Fig. 5.

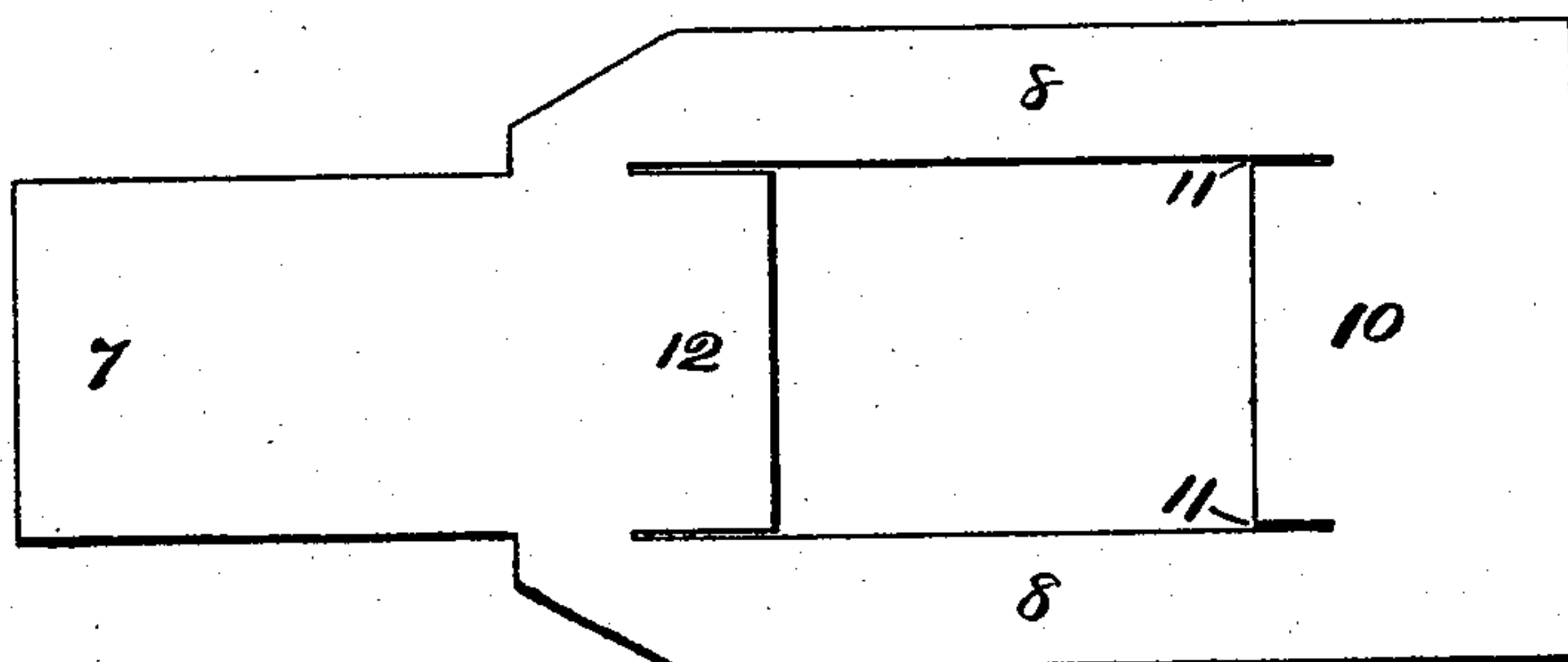
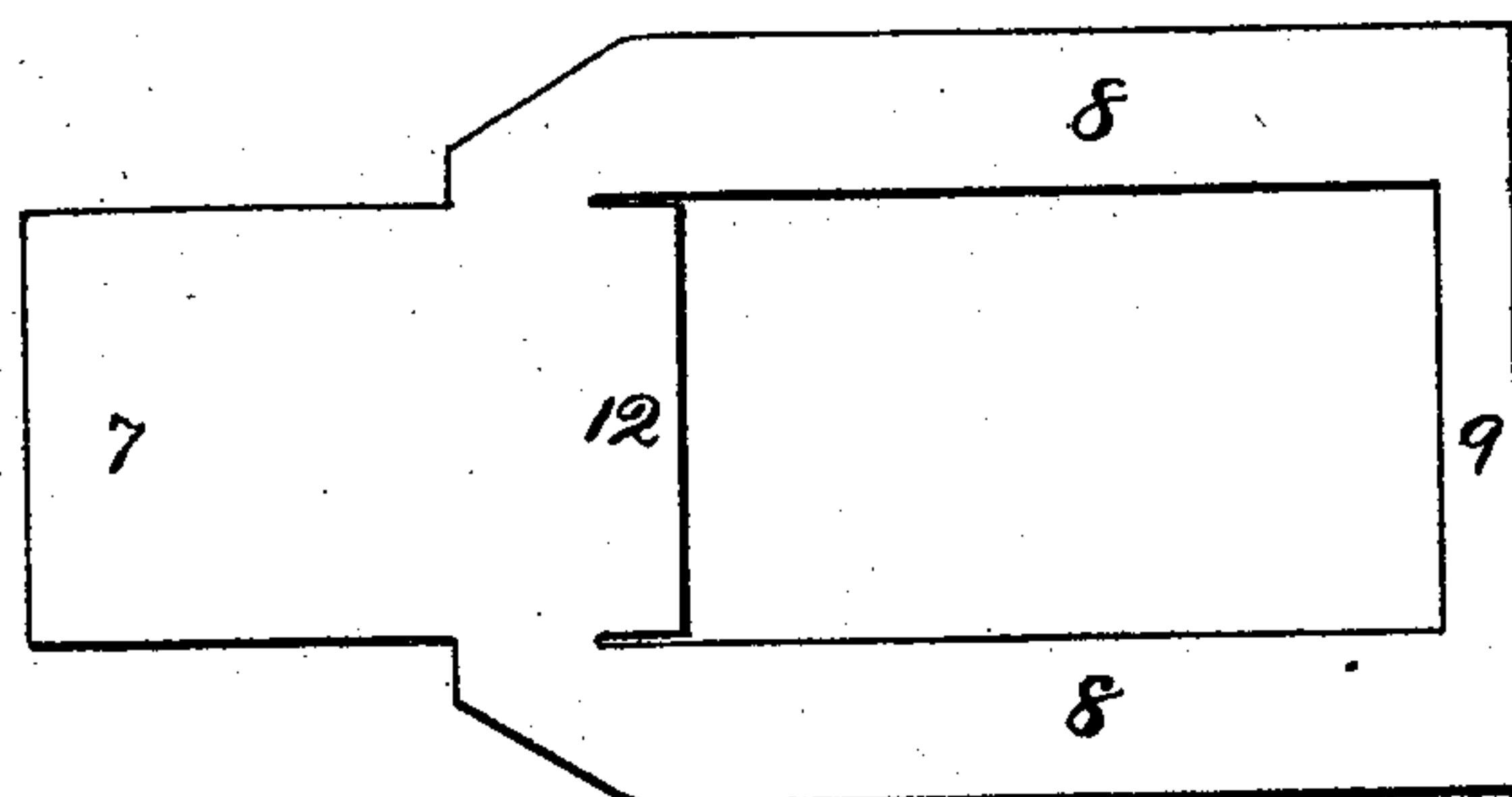


Fig. 6.



Witnesses,

John Edwards Jr.
Brannton S. Lewis.

Inventor,

William H. Hart.
By James Shepard
Att'y.

UNITED STATES PATENT OFFICE.

WILLIAM H. HART, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE
STANLEY WORKS, OF SAME PLACE.

DRIVE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 504,494, dated September 5, 1893.

Application filed May 2, 1892. Serial No. 431,563. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HART, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Drive-Chains, of which the following is a specification.

My invention relates to improvements in drive chains and the object of my improvement is to form the links thereof from two pieces of sheet metal in a cheap, simple and substantial manner.

In the accompanying drawings—Figure 1 is a plan view of two of my links properly connected together for forming a chain. Fig. 2 is an edge view of the same. Fig. 3 is a sectional view of the pintle end of one of said links on the line *xx* of Fig. 1. Fig. 4 is a longitudinal section of a portion of one side bar on the line *yy* Fig. 1. Fig. 5 is a plan view of the blank for forming the outer thickness of my chain link, and Fig. 6 is a plan view of the blank for the inner thickness thereof.

I form my chain link of two separate blanks, one constituting an outer thickness of metal and the other constituting an inner thickness.

The general form of the blanks is old, the same consisting of the tongue 7, side bars 8 and pintle blank; but I form the pintle blank 9 for the inner thickness comparatively narrow, while the pintle blank 10 for the outer thickness is wider and I also prefer to slit the same at its junction with the side bars as shown at 11, Fig. 5. I also make the tongue for the inner thickness shorter than the tongue for the outer one, and slit both blanks to form lips 12, but this of itself is not new with me and therefore the presence or absence of said lips is immaterial to my invention. The blanks so formed are placed together, the tongues and adjacent portions rolled or curved into the knuckle portion 13 and the pintle blank 10 for the outer thickness curved or rolled around the pintle portion of the inner thickness as shown in Fig. 3, thereby securing the same together and forming the general outer surface of the pintle portion from the outer thickness alone while the pintle blank 9 for the inner thickness is inclosed

thereby. I also prefer to further secure the two thicknesses of the side bars against a longitudinal movement one upon the other by means of opposing locking faces—as for instance by means of punchings 14 formed by placing said two thicknesses between a die and punch and permitting the punch to pass only partly through one thickness whereby the punchings are cut and forced partly out so that one of them is left partly in one thickness and partly in the other thickness of the side bar as shown in Fig. 4. By this construction I form a link of two thicknesses in a convenient and inexpensive manner, while at the same time the links are substantial and the two thicknesses are not liable to become detached or slip one upon the other under the pulling strain to which they are subjected in use.

I claim as my invention—

1. The herein described chain link having the open knuckle portion, the side bars and pintle portion, the same consisting of one piece of sheet metal forming an inner thickness for the open knuckle portion and one thickness of the side bars and another piece forming the outer thickness of said open knuckle portion, one thickness of said side bars and the general outer surface of the complete pintle portion, the two thicknesses of each of said side bars being secured against longitudinal movement one upon the other by means of opposing locking faces, substantially as described and for the purpose specified.

2. A chain link consisting of two pieces secured together, each of which has a knuckle portion, side bars and pintle portion one end of both pieces terminating in the double knuckle portion and the opposite end terminating in the double pintle portion with the wider and outer thickness coiled around the inner narrower thickness of said pintle portion substantially as described and for the purpose specified.

WM. H. HART.

Witnesses:

H. W. CALDWELL,
C. E. HART.