

No. 894,259.

PATENTED JULY 28, 1908.

J. E. COLLINS.

RAIL TONGS.

APPLICATION FILED NOV. 1, 1907.

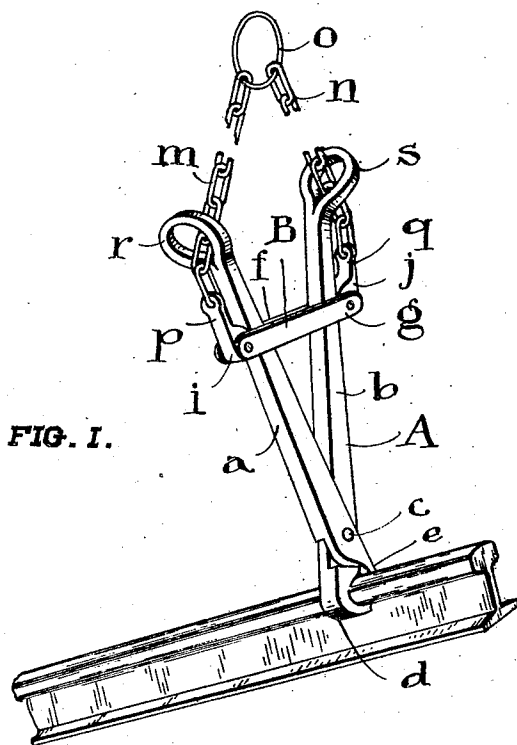


FIG. 1.

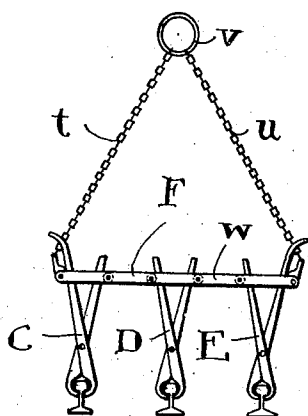


FIG. 3.

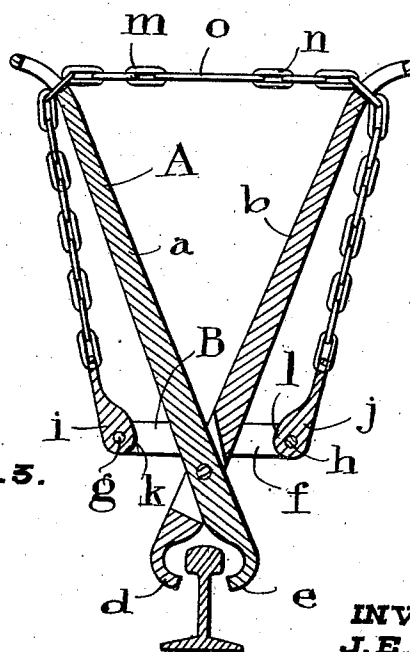


FIG. 2.

WITNESSES

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JAMES EDWARD COLLINS, OF DEPOT HARBOR, ONTARIO, CANADA.

RAIL-TONGS.

No. 894,259.

Specification of Letters Patent.

Patented July 28, 1908.

Application filed November 1, 1907. Serial No. 400,172.

To all whom it may concern:

Be it known that I, JAMES EDWARD COLLINS, of Depot Harbor, in the district of Parry Sound, Province of Ontario, Canada, have invented certain new and useful Improvements in Rail-Tongs, of which the following is a specification.

My invention relates to improvements in rail tongs, and the objects of my invention are to provide a simple form of tongs, which may be used with absolute safety to handle a rail, channel-bar and other similar forms of metal moldings or castings; and it consists essentially of the improved construction hereinafter described in the accompanying specifications and drawings, and specifically set forth in the claims.

In the drawings, Figure 1 is a perspective view of the tongs. Fig. 2 is an enlarged sectional view of the same when open. Fig. 3 is a side view of a modification of the invention, employing a plurality of pairs of tongs together.

In the drawings, like letters of reference indicate corresponding parts in each figure.

Referring to the drawings, A represents the tongs proper comprising two arms *a* and *b* pivoted at *c* and having gripping jaws *d* and *e* formed on one side of the pivot, preferably of a shape to conform to that of the rail or other article with which the tongs are to be used.

B represents the locking member comprising two bars *f* and *g*, abutting the sides of the arms *a* and *b* and connected at their extremities by pins *g* and *h*. On these pins are mounted rotatable members *i* and *j*, which have inner cylindrical surfaces *k* and *l* adapted to abut the outer side of the arms *a* and *b* and bend against them, when the locking member is pulled upwardly as shown in Fig. 1.

Suitable means are provided for raising and lowering the locking member, that shown comprising chains *m* and *n* connected at one extremity to a ring *o* and at the other to lugs *p* and *q* formed integral with the rotatable member. The ring *o* will be connected to the hook of a crane or other suitable hoisting means. If desired, however, it might simply be used as a hand grip.

To connect the chains *m* and *n* with the arms and prevent the loss of the connecting member when the wrench is open, rings *r* and *s* are formed integral with the extremities of the arms *a* and *b* and the chains extend

through these rings. To operate the wrench the gripping jaws are opened and placed about the rail, as shown in Fig. 2. The ring *o* is then pulled quickly upwardly which will cause the locking member to draw the arms *a* and *b* together and finally bind against them as shown in Fig. 1. Further upward movement of the ring will raise the rail with it. The upward pull, in addition to exerting an upward pull on the rail, also operates to clamp the jaws more firmly to it. From this it results that a very firm hold is secured on the rail, and the locking member binds against the arms sufficiently to prevent any sudden slackening of the chains from freeing the locking member from engagement with the arms. When it is desired to free the tongs the pressure on the chain is released and the locking member moved downwardly. Should it be at all difficult to effect this the cylindrical members *i* and *j* may be rotated outwardly which will at once free the locking member.

In the modified form illustrated in Fig. 3, several pairs of tongs C, D and E are connected to one locking member F, which has chains *t* and *u* at its extremities connected to a ring *v*. In this form, the bars *w* of the locking member extend along the sides of all the tongs and the intermediate rotary members have no chains connected thereto. The operation of the device is the same as in the form illustrated in Figs. 1 and 2.

It will thus be seen that I have devised a simple form of rail tongs by means of which the rail may be lifted with absolute safety, and all danger of loosening or slipping avoided.

While the invention has been described herein with great particularity of detail, yet, it will be readily understood that in carrying out the construction of the same, changes may be made within the scope of the appended claims, without departing from the spirit of the invention.

What I claim as my invention is:—

1. The combination with a pair of rail tongs including two pivoted arms with jaws thereon, of a locking member extending around the arms adapted to bind against the outside thereof, when moved towards the extremities thereof, suspending means for the locking member, and rings on the extremities of the arms, through which the suspending means extend.

2. The combination with the pair of rail

tongs, including two pivoted arms with gripping jaws thereon, of a locking member extending around the arms and adapted to bind against the outside thereof, when moved
5 towards the extremities of the arms, chains connected to the extremities of the locking member, and rings formed integral with the extremities of the arms through which the chains extend.

10 3. The combination with a pair of rail tongs including two pivoted arms, having gripping jaws thereon, of a locking member extending around the arms and adapted to bind against the outside thereof, when moved
15 towards the extremities of the arms, chains connected to the extremities of the locking member, rings on the arms through which the chains extend and a ring connecting the chains on opposite ends of the locking member.
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4. The combination with a pair of rail tongs, including two pivoted arms with gripping jaws thereon, of a locking member comprising bars extending along the sides of

the arms, pins connecting the extremities of 25 the bars, rotatable members on the pins, adapted to bind against the outside of the arms, lugs on the rotatable member, chains connected to the lugs and rings at the extremities of the arms of the tongs through 30 which the chains extend.

5. The combination with a pair of rail tongs, including two pivoted arms with gripping jaws thereon, of a locking member comprising bars extending along the sides of 35 the arms, pins connecting the extremities of the bars, rotatable members on the pins having cylindrical surfaces adapted to bind against the outside of the arms, chains connected to the rotatable members and means 40 connecting the said chains to the arms of the tongs.

Signed at Depot Harbor, in the Province of Ontario, this 14th day of October, 1907.

JAMES EDWARD COLLINS.

Witnesses:

C. E. CHASE,

G. S. HOLTBY.