

(No Model.)

H. VON DER WÜLBEIKE.

NIPPERS FOR PILE DRIVERS.

No. 350,223.

Patented Oct. 5, 1886.

FIG. 1.

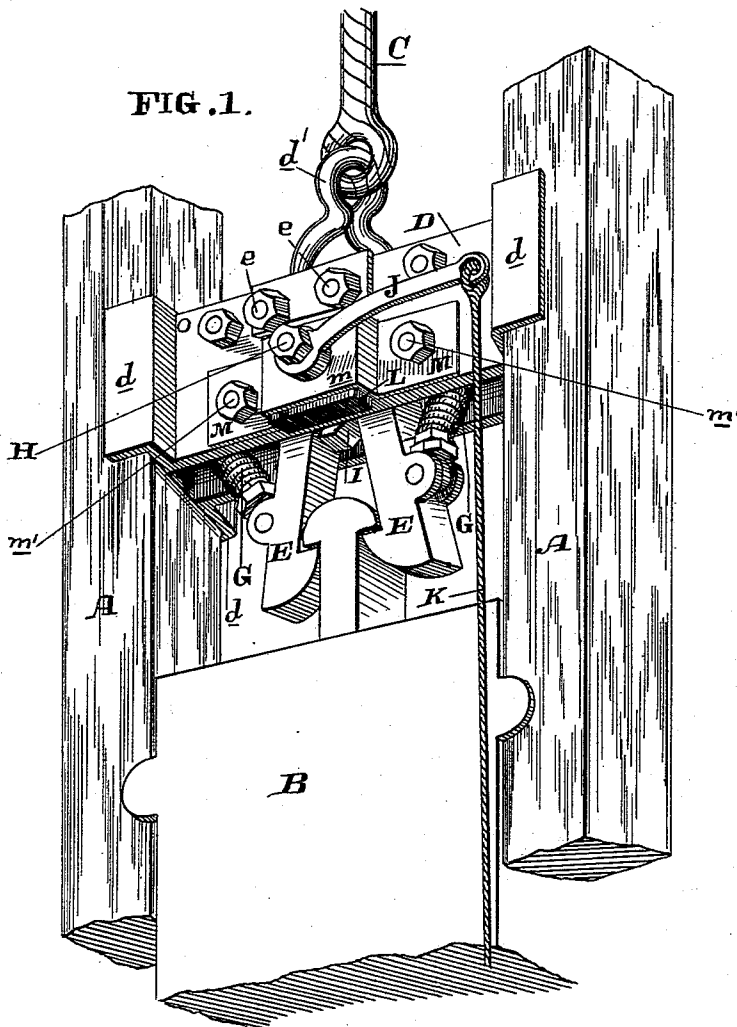


FIG. 3.

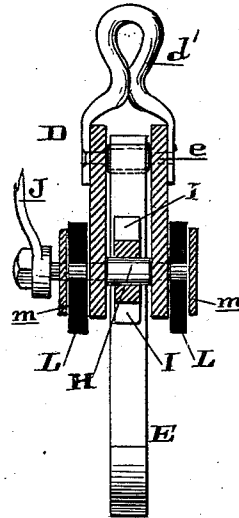
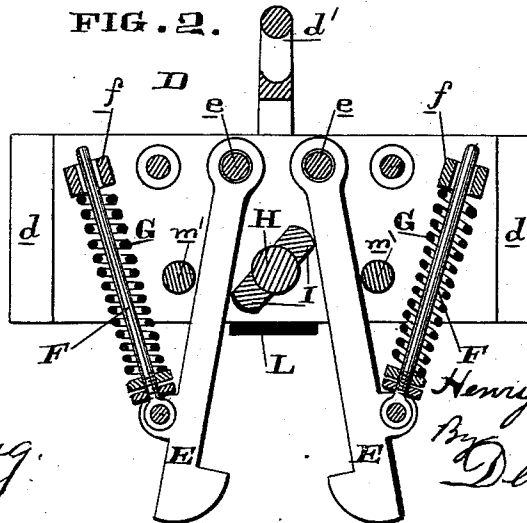


FIG. 2.



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UNITED STATES PATENT OFFICE.

HENRY VON DER WÜLBEIKE, OF ARCATA, CALIFORNIA.

NIPPERS FOR PILE-DRIVERS.

SPECIFICATION forming part of Letters Patent No. 350,223, dated October 5, 1886.

Application filed June 7, 1886. Serial No. 204,409. (No model.)

To all whom it may concern:

Be it known that I, HENRY VON DER WÜLBEIKE, of Arcata, county of Humboldt, and State of California, have invented an Improvement in Nippers for Pile-Drivers; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to that class of nippers which are used in pile-drivers for engaging the weight or hammer, whereby it may be elevated and again released, so that it may drop upon the pile.

My invention consists in the novel construction and arrangement of the opposing spring-actuated jaws or hooks and the means for relieving them of their engagement, together with peculiar cushions for the nipper-head, all of which I shall hereinafter fully describe.

The object of my invention is to provide simple and effective nippers for pile-drivers.

Referring to the accompanying drawings, Figure 1 is a perspective view of my nippers. Fig. 2 is a longitudinal section through the nipper-head. Fig. 3 is a transverse section of same.

A is a portion of the frame of the pile-driver.

B is the weight or hammer.

C is the hoisting rope or cable.

D is the nipper-head, provided with side guides, *d*, fitting in the frame A, whereby said head is guided in its vertical movement. The head has also an eye or socket, *d'*, with which the rope C is connected, whereby the nippers are raised.

Between the sides of the head D are the opposing jaws or hooks E. These are pivoted at their upper ends in the head by the bolts or pins *e*, so that their lower ends may come together or may separate.

To the backs of the jaws or hooks E, below the lower edge of the head, are pivoted the rods F, which extend upwardly between the sides of the head, and their upper ends pass through fixed sockets *f* in said head, whereby the said rods are guided.

Around the rods F are the springs G, which bear between the lower ends of said rods and the socket-guides *f*.

H is a shaft journaled transversely through the lower portion of the head and passing be-

tween the opposing jaws or hooks E. Upon this shaft, between the jaws, is a short lever-arm or cam, I, which, when lying straight up and down between the jaws, permits them to remain in contact under the influence of their springs, but which, when turned to one side by the rocking of the shaft, bears against both jaws and separates them. This movement of the shaft is effected by the lever J on its outer end, with which said lever a cord or rope, K, is connected, whereby it may be operated.

Upon the lower edge of the nipper-head D are the cushions L. These are preferably arranged, as shown, in sockets *m*, formed by brackets M, bolted to the sides of the head, and said cushions consist of rubber blocks, which are held in their sockets by the shaft H. The bolts *m'*, which secure the brackets M to the head, also act as stops to limit the separation of the jaws or hooks E.

The operation of my nippers is as follows: As they approach the fallen weight or hammer, and the ends of the jaws E come in contact with the hook or bar on said weight, they are separated to pass over the hook or bar; and immediately close again below it, and are thus held by the springs G. The weight is then hoisted, and when it has reached the required height the operator pulls upon the rope or cord K, whereby the shaft H is rocked or turned, and its cross-lever or cam I, bearing against the jaws E, separates them, and thus disengages the weight. The cushions L prevent jar when the nipper-head comes in contact with the weight.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In nippers for pile-drivers, the spring-actuated pivoted opposing jaws or hooks E, in combination with a pivoted cam or lever-arm in the same head or frame with the jaws or hooks and between them, whereby said jaws or hooks may be disengaged from the weight, substantially as described.

2. In nippers for pile-drivers, the spring-actuated pivoted opposing jaws or hooks E, in combination with the shaft H, passing between the jaws or hooks, the lever-arm or cam I on said shaft and lying between the jaws or hooks,

whereby upon the movement of the shaft said arm or cam bears against both jaws or hooks and separates them, the lever J on the end of the shaft, and the cord or rope K, attached to the lever, whereby it is operated, substantially as described.

3. In nippers for pile-drivers, the pivoted opposing jaws or hooks E, the rods F, pivoted to the backs of the jaws or hooks, and their upper ends guided by fixed sockets *f*, and the springs G upon said rods and operating to hold the jaws or hooks normally closed, in combination with the shaft H, the lever-arm or cam I on the shaft and between the opposing jaws or hooks, and adapted to separate them, the lever J on the end of the shaft, and the rope or cord K, attached to the lever, substantially as described.

4. Nippers for pile-drivers, consisting of the head D, the opposing jaws or hooks E between the sides of the head and pivoted at their upper ends therein, the rods F, pivoted to the backs of the jaws or hooks E, the sockets *f* in the head for guiding the upper ends of the rods, the springs G on the rods, whereby the jaws or hooks are held normally closed, the shaft H, journaled in the head between the jaws or hooks, the lever-arm or cam I on the shaft and adapted to separate the jaws or

hooks, the lever J on the end of the shaft, and the rope or cord K, attached to said lever, all arranged and adapted to operate substantially as described.

5. The head D of pile driver nippers, having the opposing jaws or hooks E, in combination with the cushions L on the lower edge of the head, substantially as described.

6. Nippers for pile-drivers, consisting of the head D, the opposing jaws or hooks E, pivoted in said head, the rods F, pivoted to the jaws or hooks and having their upper ends guided by fixed sockets, the springs G on the rods, the shaft H, the lever-arm or cam I on said shaft and operating to separate the jaws or hooks, the lever J on the shaft, the rope or cord K, attached to the lever, the brackets M, having sockets *m*, the bolts *m'*, by which the brackets are secured to the head, said bolts acting as stops to limit the separation of the jaws or hooks, and the cushions L in the sockets of the brackets M, and held in place by the shaft H, substantially as described.

In witness whereof I have hereunto set my hand.

HENRY VON DER WÜLBEIKE.

Witnesses:

B. B. DEMING,

GEO. W. HOPKINS.