

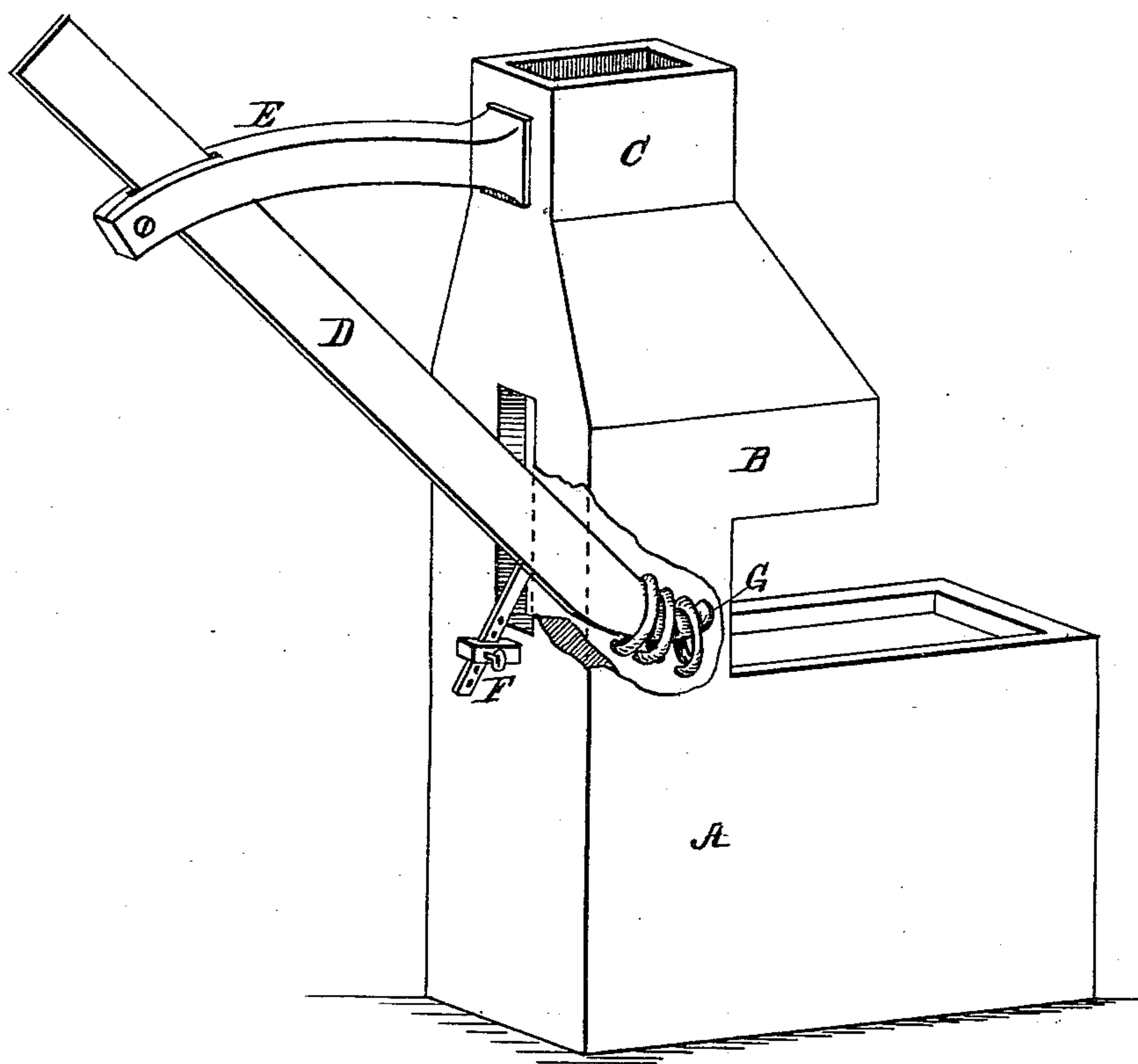
(No Model.)

R. SMITH.

DEVICE FOR HEATING LINKS.

No. 259,339.

Patented June 13, 1882.



Witnesses:

E. M. Stuart

Dayton A. Doyle

Inventor:

Richard Smith.

by *C. P. Humphrey*
Atty.

UNITED STATES PATENT OFFICE.

RICHARD SMITH, OF CUYAHOGA FALLS, OHIO, ASSIGNOR OF ONE-HALF TO
MYRA R. STANDISH, OF SAME PLACE.

DEVICE FOR HEATING LINKS.

SPECIFICATION forming part of Letters Patent No. 259,339, dated June 13, 1882.

Application filed November 9, 1881. (No model.)

To all whom it may concern:

Be it known that I, RICHARD SMITH, of Cuyahoga Falls, in the county of Summit and State of Ohio, have invented a new and useful Improvement in Forges, of which the following is a specification.

My invention has relation to devices connected with forges for feeding unclosed links toward the fire to heat them for welding.

10 The objects of my invention are to provide devices upon which the unclosed links may be placed, and on which they may slide forward toward the fire by gravitation as each heated link is removed to be welded, to cause them to
15 present the ends to be welded to the fire, and to utilize the waste heat of the fire as it ascends to the flue in heating the descending links by causing them to descend through it in their progress to the welding-fire. I accomplish
20 this by devices shown in the accompanying drawing, wherein is shown a perspective view of a forge embodying my invention, a portion whereof is represented broken away to exhibit the other parts.

25 The forge A is in the usual form, with a hood, B, and flue C. A bar of iron, D, passes through a suitable orifice in the back of the forge, which bar is sustained near its upper end by an arm, E, projecting from the flue, and rests upon the end
30 of an adjustable support, F, also connected to the forge. This bar is of such a thickness as will enter edgewise the opening in the unclosed links, thereby permitting such unclosed links to be placed thereon with their open ends down-
35 ward; but its width exceeds the longest inner diameter of such blanks, so that links placed thereon will clasp but not surround the bar. The lower end of the bar is made smaller than the other part and terminates in an upwardly-
40 turned hook, G. The bar, sustained by its supporting parts, passes diagonally through the column of heat which continually rises from the fire to the flue with the hook G directly over the fire, and is inclined downward at such an an-

gle that unclosed links placed on it at any 45 point above the hook G will slide down by gravitation alone toward said hook until, arrested by it, they hang thereon with their unclosed ends close to or in the fire.

In use unclosed links are fed by hand upon 50 the bar back of the flue, and slide thence downward until the first, arrested by the hook G, prevents the descent of those back of it and until the bar is full. While resting upon the bar the links near the lower end are subjected 55 to the heat of the fire as it passes to the flue, (and which is otherwise lost,) and are, by the time they reach the fire, brought to an even red heat throughout. The lowest link is then taken from the hook G with tongs and brought 60 to a welding-heat, and this is repeated, the other links sliding forward as each successive link is removed.

Bars of suitable width and thickness should be provided for links of different sizes, which 65 can be readily attached or removed from the supports.

I do not confine myself to the exact devices or arrangement here shown; but they may be modified or changed without departing from 70 my invention.

I claim as my invention—

In combination with a forge, a bar of such thickness as to permit unclosed chain-links to be placed thereon, having a width exceeding 75 the longest internal diameter of such links, and passing through the heat escaping from the fire to the flue at such an angle as that unclosed links placed thereon will gravitate toward the fire, substantially as shown, and for the pur- 80 pose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of October, A. D. 1881.

RICHARD SMITH.

Witnesses:

C. F. WAGONER,
C. P. HUMPHREY.