

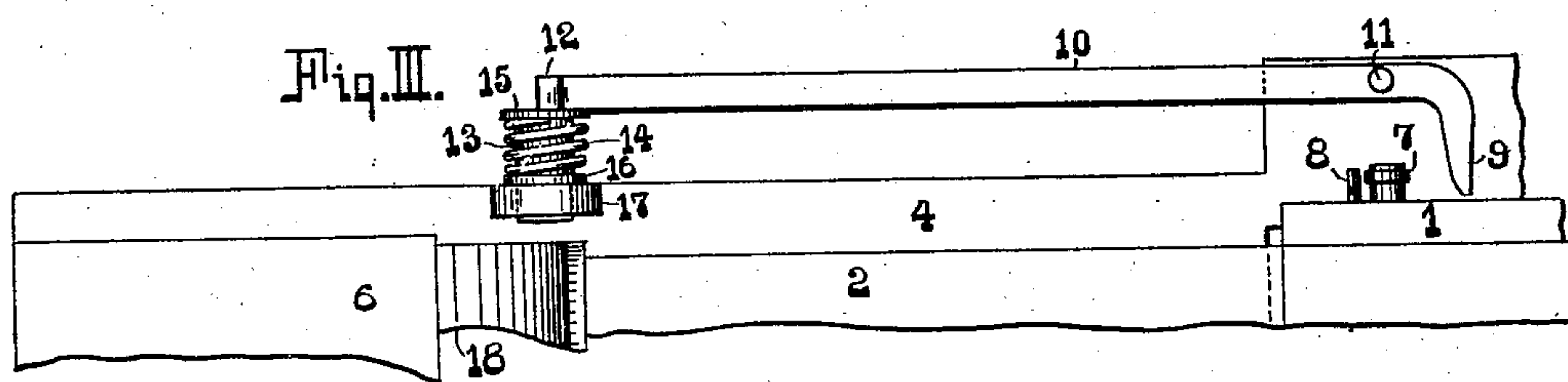
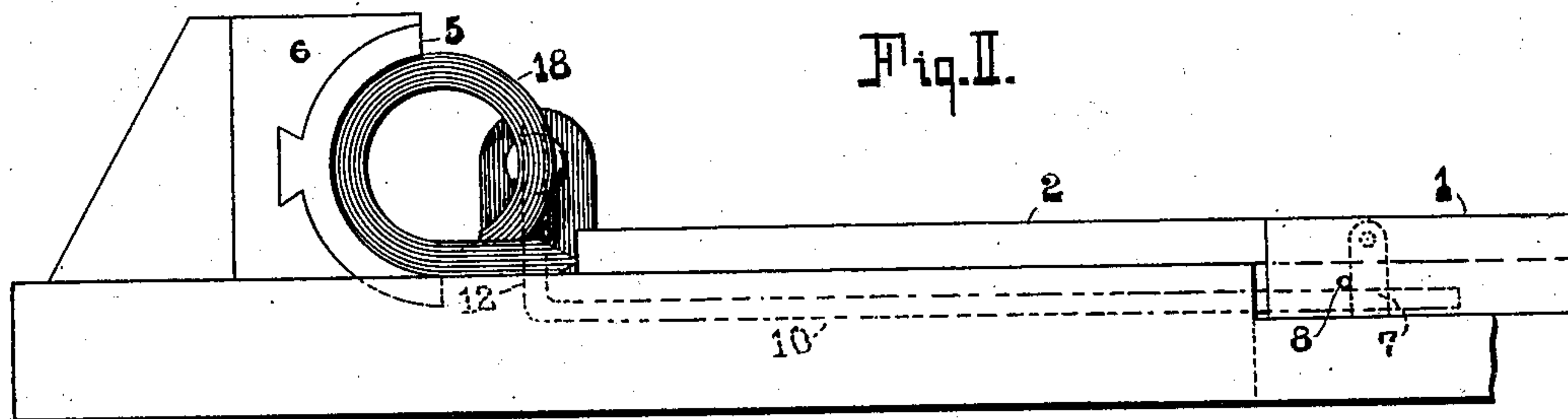
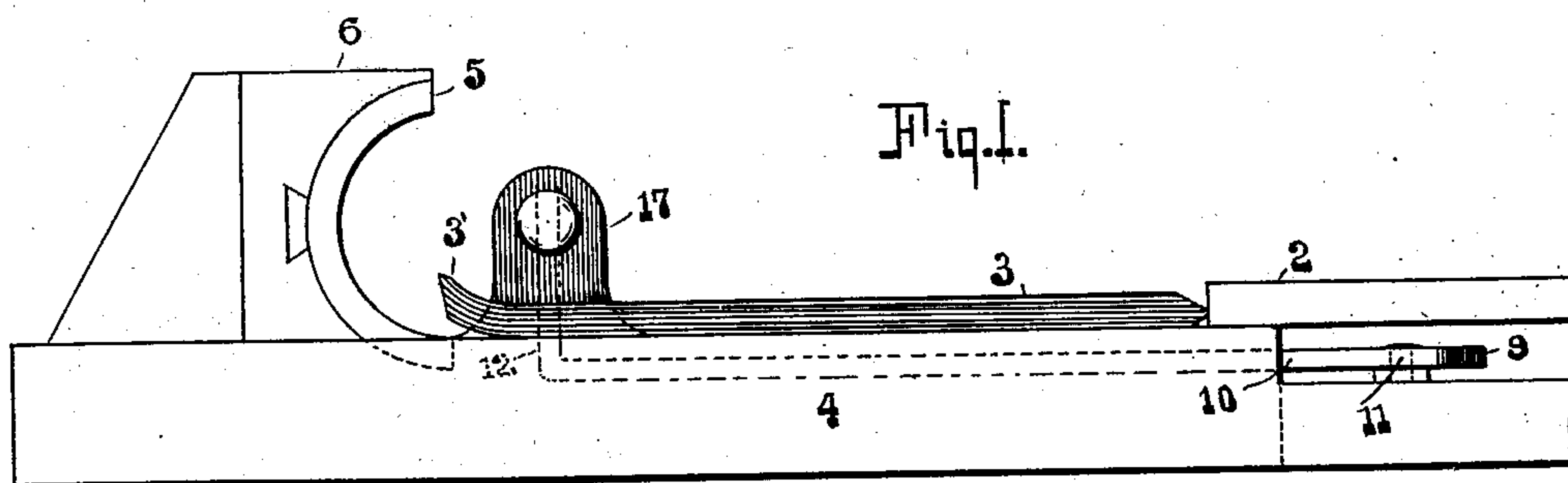
No. 708,015.

Patented Sept. 2, 1902.

G. G. & R. O. BLAKEY.
SKELP BENDING MACHINE.

(Application filed Nov. 1, 1901.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE G. BLAKEY AND ROBERT O. BLAKEY, OF PITTSBURG,
PENNSYLVANIA.

SKELP-BENDING MACHINE.

SPECIFICATION forming part of Letters Patent No. 708,015, dated September 2, 1902.

Application filed November 1, 1901. Serial No. 80,745. (No model.)

To all whom it may concern:

Be it known that we, GEORGE G. BLAKEY and ROBERT O. BLAKEY, citizens of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered new and useful Improvements in Skelp-Bending Machines, of which the following is a specification.

In the accompanying drawings, which make part of this specification, Figure I is a side elevation of a skelp or strip bending machine, showing a blank in position to be pushed around the die portion of the machine. Fig. II is a similar view showing the blank bent into annular form. Fig. III is a plan view, partly broken away, showing the tripping mechanism.

In the manufacture of pipe and pipe-couplings it has been necessary to heat the skelp plates or strips to a temperature most adapted to the bending action of rolls or formers. The heating is an extra expense of both fuel and labor, while the value of the product is depreciated by oxidation. The skelp or strip after being heated and bent into annular form was next passed into the welding-furnace to be reheated and afterward subjected to such welding process as becomes the nature of the article. Each heating of the blank before becoming a finished product increases the thickness of the scale and causes a greater wear and tear upon the cutters, taps, and dies used in finishing the ends of the pipe or in tapping the couplings before they are usually secured to the pipe.

The object of our invention, generally stated, is to first bend the blank without heating it; second, to increase the output of coupling or pipe skelp; third, dispense with the skilled labor heretofore found necessary in bending the blanks, and, fourth, obviate the formation of scale by bending without first heating it.

In the drawings accompanying this specification, 1 represents a ram operated by any desired power.

2 is an extension-arm of the ram, which pushes the strip 3 forward on the table 4.

5 is an arc-shaped die, preferably formed less than a semicircle. We also prefer to make

the die 5 detachable from the block 6. Block 6 is likewise best made detachable from the bed-plate of the machine.

7 represents an arm swiveled on the ram 1. 8 is a pin secured to said ram and in close proximity to said arm 7 and acts as a check or stop against which the arm 7 bears while in contact with the end 9 of lever 10. 11 is the fulcrum of said lever. 12 represents an upwardly-turned portion of said lever and bears against the flanged head 15 of pin 13. The forward end of pin 13 is movably secured in vertical end 17. 14 is a coil-spring surrounding said pin and having its bearings on the flanged head 15 of the pin and the boss 16, which extends outwardly from the vertical end 17.

In the operation of our invention and assuming the machine to be working on coupling-blanks, the operator preferably has his strips 3 bent at one end, as indicated at 3'. Strip 3 is placed on the table 4 with the bent end 3' in line with the arc-shaped portion of die 5. The rear end of the strip 3 is engaged by the extending arm 2 of the ram 1. The ram travels toward the die 5, pushing the strip forward and around the surface of said die until it assumes the shape shown in Fig. II. The strip has assumed the shape usually required in a coupling or pipe skelp that is to be "lap welded" before being charged into the welding-furnace. In the forward movement of the ram the lower end of arm 7 comes into contact and rises over the end 9 of lever 10 and falls back into its original position after passing over said end 9 of the lever. On the reversal of the movement of the ram the lower end of arm 7 rests against the pin 8 and engages the inner side of the end 9 of lever 10. The rapid movement of the ram causes the arm to bear quickly against the end of arm 9 of the lever 10, pressing that end of the lever outward and causing the other end 12 of the lever to move inwardly with a quick jerky motion and pushing the pin 13 inwardly. The pin 13 strikes the coupling-blank 18 and pushes it from the die 5.

In the drawings and description we have shown and described but one form of blanks—i. e., lap-weld. However, we do not limit our

invention to forming lap-weld blanks, as
"butt-weld" blanks can as readily be formed
on our machine without departing from our
invention.

5 Having described our invention, what we
desire to secure by Letters Patent is—

In a skelp or strip bending machine, a die,
a ram to push the end of a strip against and
around the face of said die to form an annu-
10 lus and a lever actuated by the ram on its

return movement, whereby the annulus is
discharged from said die.

Signed at Pittsburg, Pennsylvania, this 26th
day of October, 1901.

GEORGE G. BLAKEY.
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Witnesses:

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