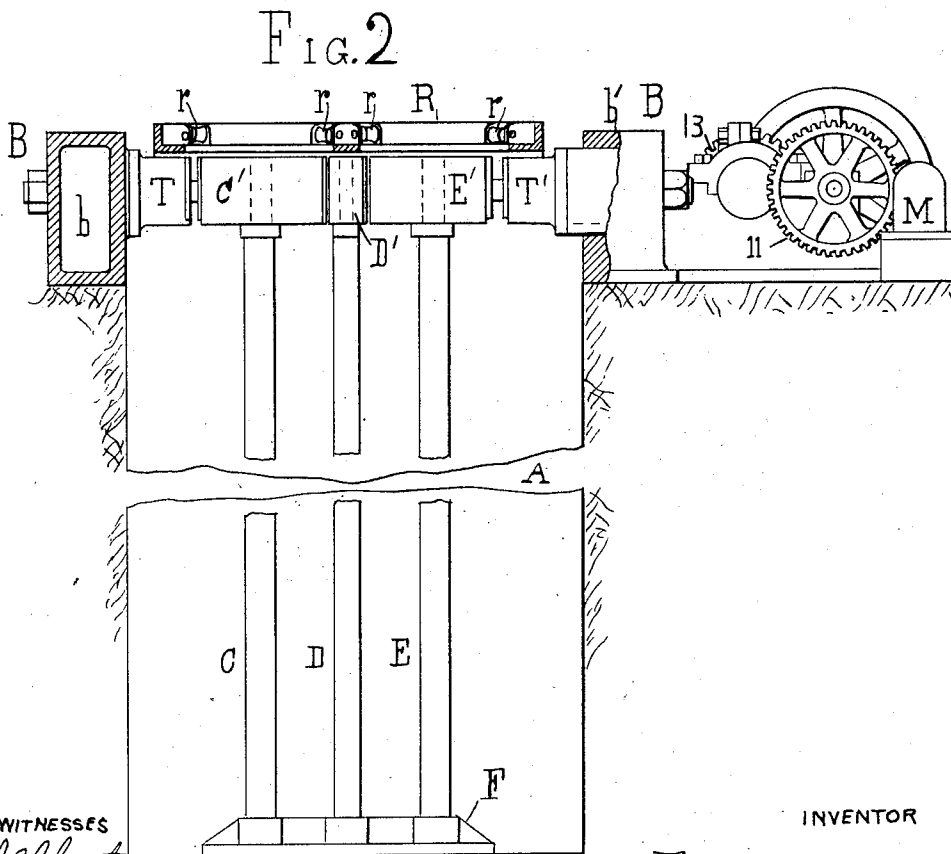
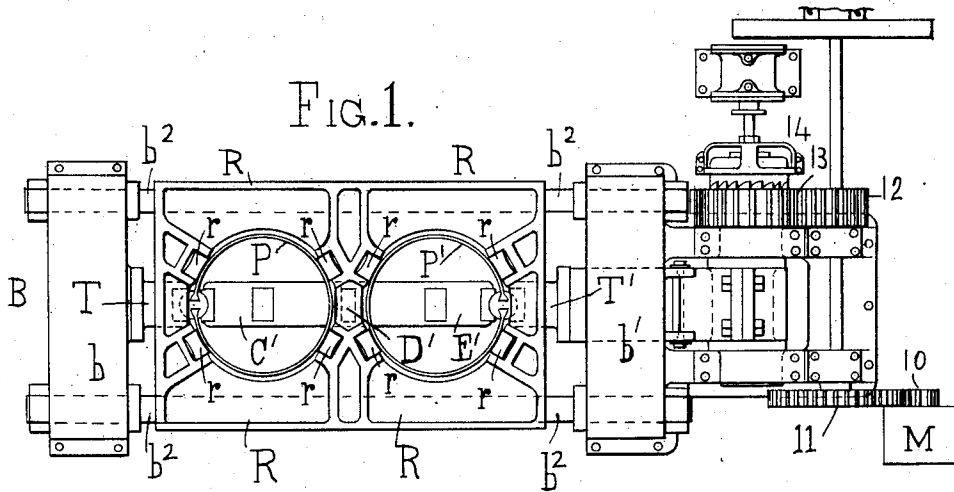


J. FRASER.
PRESS FOR MAKING PIPES.
APPLICATION FILED NOV. 20, 1909.

1,037,889.

Patented Sept. 10, 1912.



WITNESSES
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JOHN FRASER, OF HACKENSACK, NEW JERSEY.

PRESS FOR MAKING PIPES.

1,037,889.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Application filed November 20, 1909. Serial No. 529,114.

To all whom it may concern:

Be it known that I, JOHN FRASER, a citizen of the United States of America, residing in Hackensack, in the county of Bergen, in the State of New Jersey, have invented a certain new and useful Improved Press for Making Pipes, of which the following is a specification.

My invention relates to the construction of a press for squeezing lock bars on the upset edges of metal plates bent up into pipe form, to close the longitudinal joints to form sheet metal pipes.

My invention is more particularly intended as an improvement upon the construction of such a press forming the subject of Patent No. 914,369, granted March 2, 1909, to myself and Thomas Gray.

The main object of my invention is to so construct such a press as to increase the output especially for pipe sections of the smaller diameters, and each of which is made from a single sheet with but one longitudinal joint.

In the accompanying drawing Figure 1 is a plan view of my improved press; Fig. 2 is a sectional elevation.

As in the case of the press of the above mentioned patent, a pit A is constructed deep enough for the longest pipe section to be formed, and at the mouth of the pit is mounted the horizontal press frame B, consisting of cross-heads b and b^1 united by the bars b^2 , the whole frame being suitably bolted to the foundations. In a suitable foot piece F at the bottom of the pit, I mount three properly spaced vertical rods C, D and E, which severally carry at their tops in the plane of the press frame mandrels or squeezing tools, C^1 , D^1 and E^1 respectively, in line with each other.

The tube guiding and truing frame R is made to guide two tubes P, P^1 , through at a time, as shown in Fig. 1, with one squeezing tool C^1 within one tube, another tool E^1 within the other tube, and the intermediate tool D^1 between the two tubes. This frame R, which is provided with suitable antifriction rollers r to bear on the outer circumferences of the pipe sections at the desired points, is so mounted upon the press frame B that it is free to move horizontally parallel with the line of the tools C^1 , D^1 , E^1 , to accommodate itself and the pipes to the movements of the tools, to the limited ex-

tent required. The most convenient way of arranging this is to mount the frame R upon the longitudinal bars b^2 , Fig. 1, so that it can move thereon and also so that it can be lifted off and replaced by another frame for pipes of other diameters within the range of the machine.

Secured to the cross-head b is the stationary squeezing tool T in immediate coöperation with the tool C^1 in closing the lock-bar on the pipe P, while at T^1 is the reciprocating squeezing tool in immediate coöperation with the tool E^1 to close the lock-bar on the pipe P^1 . The inward movement of the tool T^1 is sufficient not only to close the lock-bar on pipe P^1 , but also to force the diametrically opposite side of the pipe against the tool D^1 , the latter against the pipe P, the latter against the tool C^1 , and the latter to close the lock-bar of pipe P with the aid of the coöperating fixed tool T.

Any suitable means may be provided to reciprocate the tool T^1 . In the drawing I have shown for the sake of illustration the same mechanical means as are described in the above mentioned patent and composing a crank shaft S driven from a motor M through suitable gearing 10, 11, 12 and 13, and hydraulic clutch 14.

I claim as my invention—

1. In an apparatus for closing longitudinal lock-bar pipe joints, a horizontal frame and guides for two pipes, said guides movable horizontally on the frame in combination with a series of squeezing tools in line with each other, comprising a fixed tool on the frame, another tool reciprocating in the frame, and intermediate tools, upright rods for supporting said intermediate tools and means for actuating the reciprocating tool.

2. In an apparatus for closing longitudinal lock-bar pipe joints, the combination of guides for two pipes with a series of squeezing tools in line with each other, comprising a fixed and reciprocating tool and intermediate tools, one within each pipe and one between adjacent pipes, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses.

JOHN FRASER.

Witnesses:

M. E. KEIR,
WALTER ABBE.