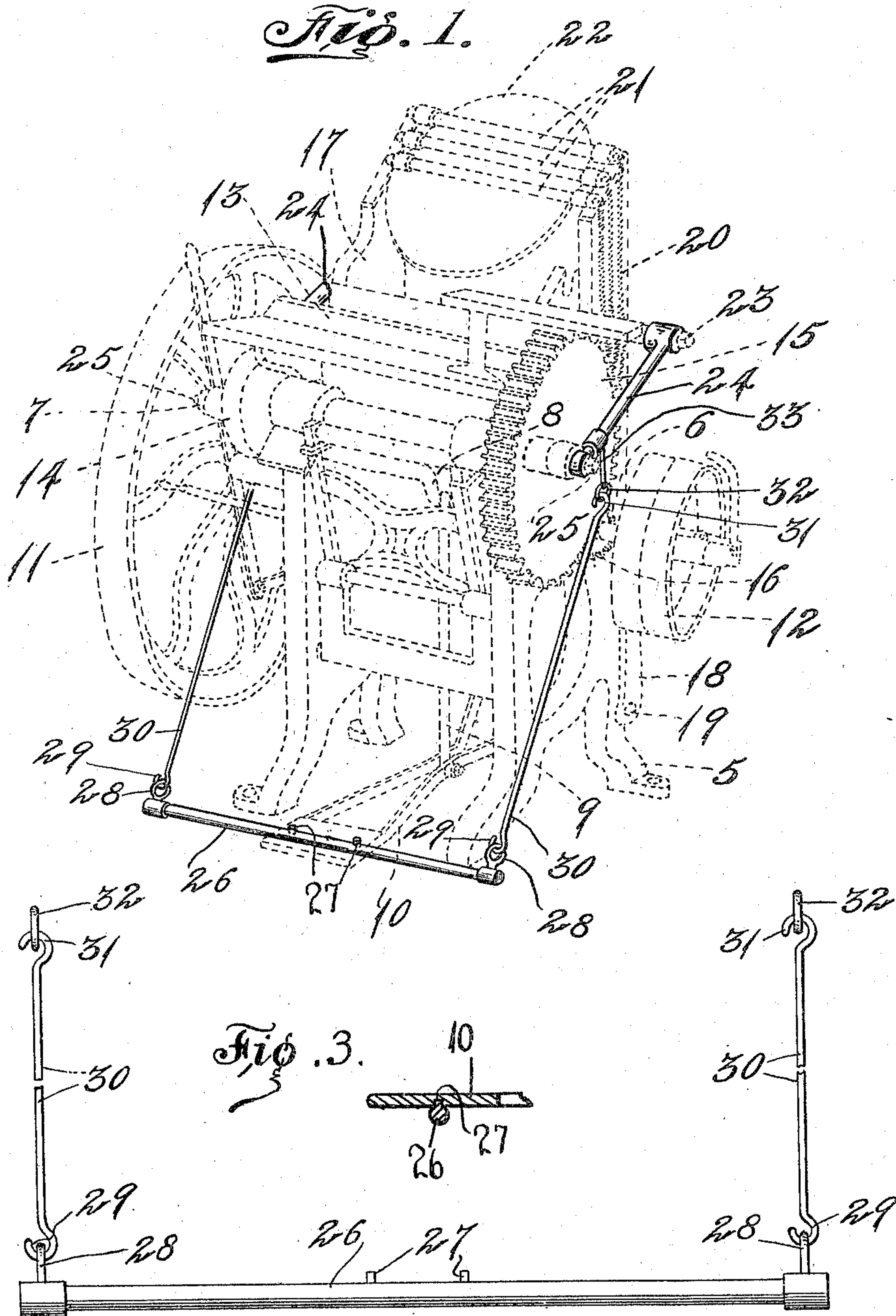


E. BOURQUIN.  
FOOT TREADLE.

APPLICATION FILED AUG. 9, 1909.

957,863.

Patented May 17, 1910.



*Fig. 2.* *Elliott Bourquin.*

Witnesses  
Jos. Gregory.  
M. D. Miller.

By *Charles Chandler*

Attorneys



# UNITED STATES PATENT OFFICE.

ELLIOTT BOURQUIN, OF LATTA, SOUTH CAROLINA.

## FOOT-TREADLE.

957,863.

Specification of Letters Patent.

Patented May 17, 1910.

Application filed August 9, 1909. Serial No. 511,963.

*To all whom it may concern:*

Be it known that I, ELLIOTT BOURQUIN, a citizen of the United States, residing at Latta, in the county of Marion, State of South Carolina, have invented certain new and useful Improvements in Foot-Treadles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to treadles and more particularly to the class of treadle attachments for printing presses.

The primary object of the invention is the provision of a treadle attachment belonging to the class of printing presses in which there is a connection between the foot treadle and the pitmen controlling the bed so as to shorten the stroke of said pitmen during the movement of the platen of the machine thus effecting a single impression to each kick of the treadle.

Another object of the invention is the provision of a treadle attachment for printing presses which is readily and easily applied, making the operation of the press easier and more quick in action, and one that is thoroughly efficient and reliable in operation and also that is inexpensive in the manufacture.

With these and other objects in view, the invention consists in the construction, combination, and arrangement of parts as will be hereinafter more fully described in detail, illustrated in the accompanying drawing, which disclose the preferred form of embodiment of the invention to enable those skilled in the art to carry the invention into practice and as pointed out in the claim hereunto appended.

In the drawings:—Figure 1 is a perspective view of a printing press with the invention applied thereto. Fig. 2 is a detail plan view of the treadle attachment removed from the press. Fig. 3 is a fragmentary vertical sectional view through the treadle and cross bar and the treadle attachment.

Similar reference characters indicate corresponding parts throughout the several views in the drawings.

Referring to the drawings by numerals the numeral 5 designates a printing press of the ordinary well known construction provided with suitable boxes in which are journaled the driving shaft 6 and the crank

shaft 7. The driving shaft is formed with the usual crank 8, to which is connected a rod 9, which also has connection with a foot treadle 10, and this driving shaft has fixed at one end a fly wheel 11, while at the opposite end is mounted a driving pulley 12, so that the press may be operated by power transmitting mechanism or by the foot treadle.

The platen 13, of the press is actuated by a cam disk 14, fixed to one end of the crank shaft 7, and on the opposite end of this shaft is mounted a gear 15, the same meshing with a pinion 16, fixed to the driving shaft 6 of the press. The said platen 13 is adjustably mounted upon a suitable trunnion that is journaled in a box of the frame.

Pivotally connected to the frame is a bed 17, on which the form is placed and this bed is rigidly attached to the arms 18, the lower ends of which are connected to the pivot rod 19, passing laterally from side to side of the frame. Pivotally connected to the bed 17, is a roller frame 20, the latter carrying the usual ink rollers 21 adapted to travel upon an inking disk 22, and connected to wrist pins 23 on the roller frame 20 are side arms or pitmen 24, which latter are also connected to wrist pins 25, eccentrically mounted in the disk 14 and gear 15, and through the medium of these side arms the bed of the machine is actuated.

The treadle attachment comprises a bar 26, having formed centrally thereof spaced vertical lugs 27, rising from the upper face of said bar and these lugs are adapted to engage in correspondingly shaped depressions formed in the under face of the foot treadle 10, to prevent the displacement of the bar with respect to said foot treadle. At opposite ends of the bar 26, are loosely connected rings 28, the latter being engaged by hook terminals 29 formed at the lower ends of rods 30, which latter are also formed at their upper ends with hook terminals 31, the latter being engaged with rings 32, carried by short links 33, attached to the side arms or pitmen 24 of the press and in this manner the throw of said side arms or pitmen is shortened to effect a single impression to each kick of the treadle. It is apparent that when the pitman or rod 9 is disconnected from the treadle 10, and the treadle attachment has been applied by connecting it to the treadle 10, and said arms 24, a single downward pressure of the treadle



10 will effect a single rotation of the gears  
25, thereby producing the single impression  
of the press, so that it can be seen that by  
the use of the treadle attachment with the  
5 press a greater amount of work may be had  
with a minimum degree of motive power in  
the operation of the press.

From the foregoing, the construction and  
operation of the invention will be readily  
10 understood without the necessity of a more  
extended explanation and therefore the same  
has been omitted. It being understood of  
course, that the rod 9 is detachable from the  
treadle when the treadle attachment is be-  
15 ing used.

What is claimed is:—

The combination with a printing press  
having side arms, of a foot treadle for op-  
erating the latter, a bar having lugs ris-  
ing centrally from the bar to engage the 20  
foot treadle, rings loosely connected to the  
ends of the bar, and connections between the  
rings and said side arms.

In testimony whereof, I affix my signa-  
ture, in presence of two witnesses.

ELLIOTT BOURQUIN.

Witnesses:

C. E. BETHEA,  
W. L. GODDY.