

No. 747,391.

PATENTED DEC. 22, 1903.

D. R. EDWARDS.

NIGGER BAR.

APPLICATION FILED MAR. 1, 1901.

NO MODEL.

Fig. 2.

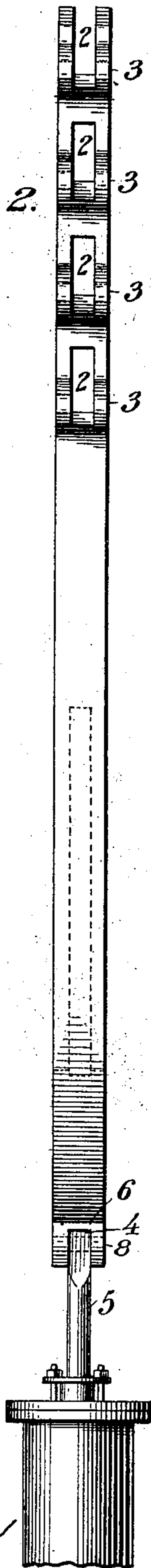
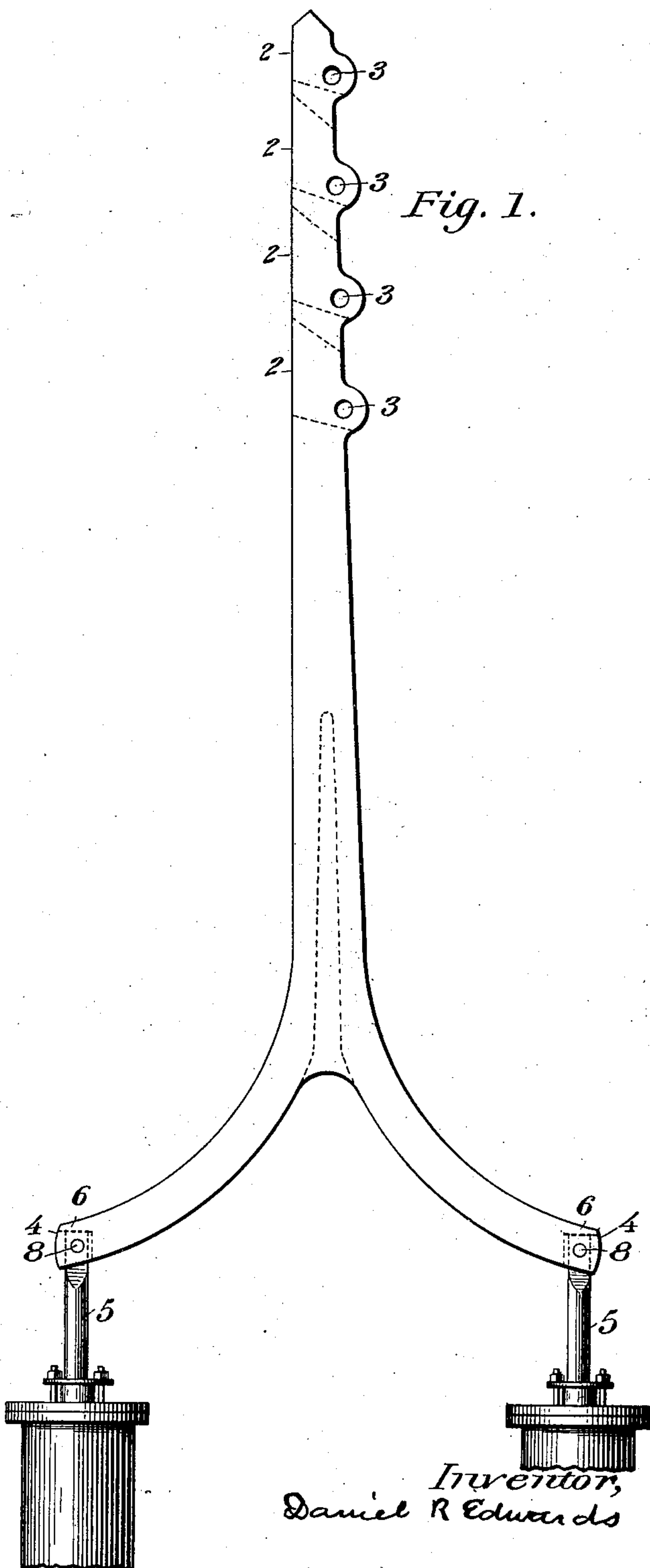


Fig. 1.



Witnesses,
T. C. Sears
E. J. Hickman

Inventor,
Daniel R. Edwards

UNITED STATES PATENT OFFICE.

DANIEL R. EDWARDS, OF EMPORIA, TEXAS.

NIGGER-BAR.

SPECIFICATION forming part of Letters Patent No. 747,391, dated December 22, 1903.

Application filed March 1, 1901. Serial No. 49,529. (No model.)

To all whom it may concern:

Be it known that I, DANIEL R. EDWARDS, a citizen of the United States, and a resident of Emporia, in the county of Angelina and State of Texas, have invented an Improvement in Nigger-Bars, of which the following is a specification.

My invention relates to an improvement in nigger-bars used in connection with steam-cylinders to turn the logs on sawmill-carriages.

The object of this invention is to provide a novel construction that will make a much more durable and stronger bar than those now in use and at the same time more convenient to operate. To attain this object, I cast a bar in one piece, making the bar hollow throughout a part of its length, which adds to its strength and reduces the weight. I also make the bar narrow at the top, where strain is light, and wide near the bottom, where the strain is great.

In the accompanying drawings, Figure 1 is a view of my improved nigger-bar in side elevation to be used in connection with two steam-cylinders and connected to the piston-rods of the cylinders, as shown. Fig. 2 is a front elevation at right angles to that shown in Fig. 1.

My improved nigger-bar is made of one piece of steel or other suitable metal and has pockets or recesses (indicated by the numerals 2 2 2 2) for the reception of suitable teeth that go to make up a complete bar. These pockets are shown in dotted lines in Fig. 1. The teeth are not shown, but may be made of any suitable construction. The numerals 3 3 3 3 indicate holes for the reception of pins to fulcrum the teeth in place.

The lower part of the bar branches each way from the center, and at either extremity is a recess or pocket (indicated at 4 4) for the reception of the piston-rods 5 5. These pockets or recesses 4 4 do not project entirely through the bar, but leave a wall of solid metal, as indicated at 6 6, over the top of piston-rods 5 5. This is done to allow the ends of the piston-rods to come in contact with this solid metal as they push upward, and so take the heavy strain off the pins 8 8, which connect the piston-rods with the nigger-bar.

The great improvement in my style of con-

struction of such a bar lies in the fact that there are no rivet-holes to reduce the strength of the bar and cause it to break, as in bars heretofore constructed.

I may make changes in form or details of construction as I develop my invention; but such changes shall not affect this invention.

It will be observed by reference to the drawings that the pockets 2 2 2 2 are made wider at their front ends than at the rear ends thereof, in which the pivot-holes 3 3 3 3 are formed. The pockets of the bar are constructed thus to receive the inner ends of the teeth and to permit the outer ends of the teeth to fold upward. The bar is formed with interior webs (shown in Fig. 2) between the adjacent ends of the pockets, against which the corresponding teeth may fold, said webs limiting the movement of the corresponding teeth. Against these webs the corresponding teeth may rest when in working position. These webs are preferably made wider at their rear ends than at their forward ends to strengthen the body of the bar adjacent to the rivet-holes, the webs being tapered toward their front ends to lighten the construction of the bar and also to effect the widening of the pockets at their forward ends. It will be seen that the teeth may be supported upon the lower wall of the corresponding pocket throughout the whole length of the web, the web thereby forming a very firm support for the teeth. The upper and lower walls of each of the pockets diverge from one of the ends thereof outward to the opposite ends thereof, as shown.

What I claim as my invention is—

1. A nigger-bar having a body formed of a single integral metal casting, said body formed with teeth-pockets to receive the inner ends of the teeth and to permit the teeth to fold upward within the corresponding pockets, said body formed with integral interior webs between adjacent pockets to limit the movement of the teeth in the corresponding pockets, and with pivot-holes at the rear ends of the pockets to receive the pivot-pins of the teeth, the upper and lower walls of each of said pockets diverging from one of the ends of the corresponding webs to the opposite ends.

2. A nigger-bar having a body formed of a single integral metal casting, said body formed with teeth-pockets to receive the in-

ner ends of the teeth and to permit the teeth to fold upward within the corresponding pockets, said body formed with integral interior webs to limit the movement of the teeth in the corresponding pockets of the bar, and with pivot-holes at the rear ends of the pockets to receive the pivot-pins of the teeth, the base of each of said pockets arranged to support the corresponding tooth the whole length of said base when the tooth is in operative position.

3. A nigger-bar having a body formed of a single integral piece of metal bifurcated at its lower end and constructed with teeth-pockets, said body at its lower end formed with recesses 4 4 and with solid walls at the top of said recesses for the purpose described.

4. A nigger-bar having a body formed of a single integral metal casting constructed

with pockets for the reception of teeth, said bar formed with integral webs separating adjacent pockets, and with pivot-holes at the rear ends of said pockets to receive pivot-pins of the teeth, the upper and lower walls of each of said pockets diverging from one of the ends of the corresponding webs to the opposite ends, the base of each of said pockets arranged to support the corresponding tooth the whole length of said base when the tooth is in operative position.

In testimony that I claim the foregoing as my own I have affixed my signature in the presence of two witnesses.

DANIEL R. EDWARDS.

Witnesses:

W. N. CURLEY,
T. C. SEARZ.