(No Model.)

F. X. KUHN.

MACHINE FOR ROLLING BARRELS AFTER BEING PITCHED.

No. 327,179. Patented Sept. 29, 1885.

Fig. 1.

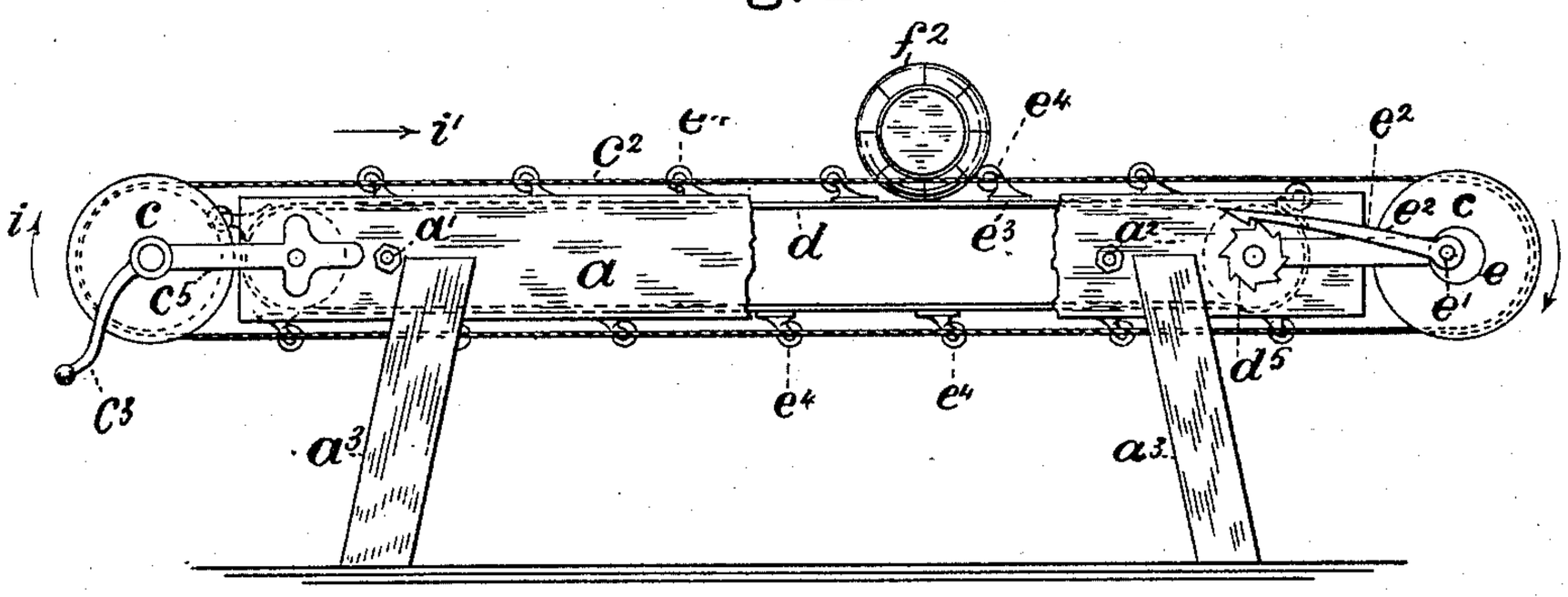


Fig. 2.

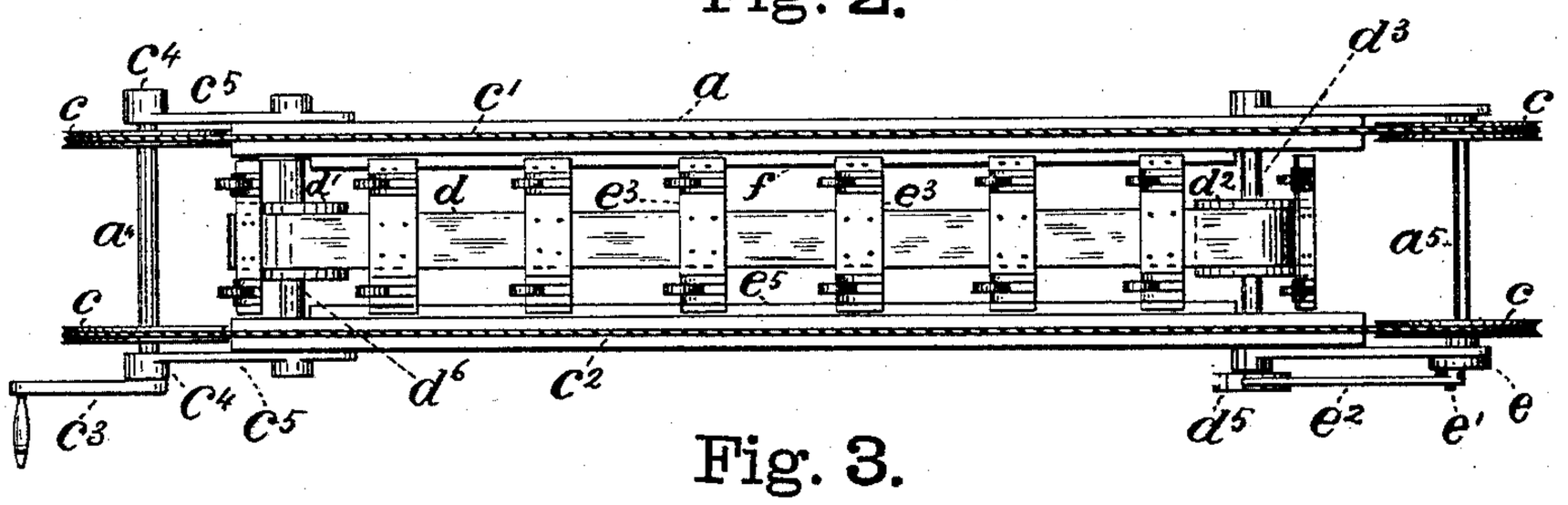
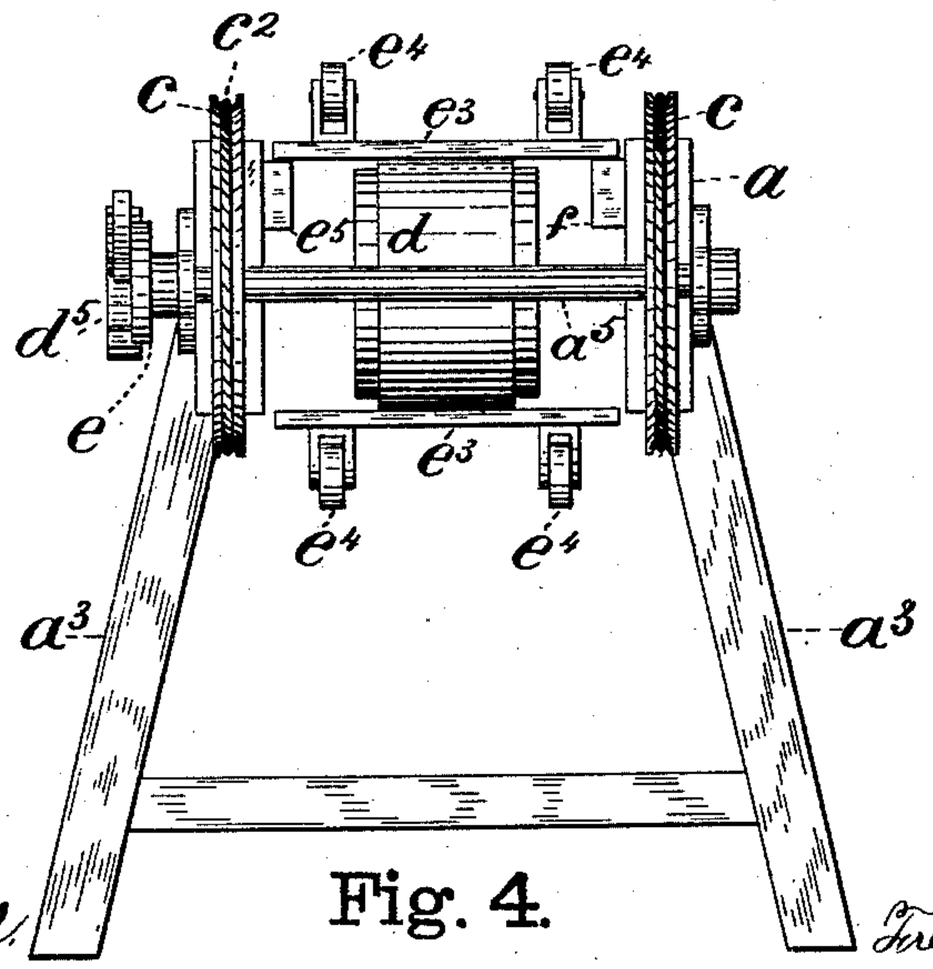


Fig. 3.



Witnesses.
Jennie M. Caldwell.
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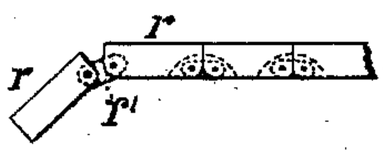
Fig. 4.



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MACHINE FOR ROLLING BARRELS AFTER BEING PITCHED.

SPECIFICATION forming part of Letters Patent No. 327,179, dated September 29, 1885.

Application filed March 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK X. KUHN, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Machines for Rolling Barrels after being Pitched, of which the following is a specification.

During the operation of pitching barrels it is necessary, after the hot pitch has been poured into a barrel, to keep it rolling or turning, so as to spread the pitch evenly over its entire surface, and also, to keep the barrel turning or rolling a sufficient length of time to permit the pitch to cool.

My invention is adapted to keep the barrel in a comparatively rapid rolling motion while advancing slowly along, after being put onto the machine, until it leaves it, all of which will be fully and clearly hereinafter shown, described, and claimed, by reference to the accompanying drawings, in which—

Figure 1 is a side elevation of the machine, showing a portion of the side frames broken away so as to expose the mechanism within them. Fig. 2 is a plan or top view. Fig. 3 represents an enlarged end view, and Fig. 4 represents a modified construction of chain to be used in place of the common chain or cable. It consists of wooden blocks r, jointed together in any well-known way by the parts r'.

In said drawings, a represents the side frames of the machine. It is usually made of wood; but cast-iron or any other suitable material may be used. It is held together by the usual cross-bars and tie-rods, a' a^2.

The letters a^3 represent the legs of the machine.

At each end of the machine are mounted the shafts a^4 a^5, having the grooved-faced pulleys c, around each of which is placed a cable chain or cord, c' c^2, which may be provided with a tightening device, if desired.

c^3 represents the handle for operating the cable and pulleys c. The office of these cables is to give the barrel a rapid rotary motion while it advances slowly along, as will be more fully hereinafter shown. The shafts are mounted in boxes c^4 in the iron supports c^5, which are rigidly secured to the ends of the frame of the machine.

An endless belt, d, is connected to the pulleys d' d^2, which are mounted on shafts d^6 d^3 in bearings d^4.

On the shaft d^3 is a ratchet-wheel, d^5, rigidly secured thereto, and to the shaft a^5 is fastened a small disk or pulley, e, having a crank-pin, e', set a little off from the center of the pulleys e.

To the crank-pin e' is jointed a pawl, e^2, the opposite end of which engages with the ratchet d^5.

On the endless belt d is rigidly secured a series of cross pieces, e^3, at about equal distances apart on the belt d. Each cross-piece e^3 is provided with the small rollers or wheels e^4, set, in suitable bearings, as shown.

e^5 f represent a ledge on each inner side of the frame for the ends of the cross-pieces to rest on as they are moved along the machine by the endless belt.

In place of the cable or rope, a belt composed of jointed wooden blocks r may be used, and made in any well-known way; or an ordinary chain may be used, and a chain and sprocket-wheels may be used in place of the belt d, if desired.

The operation of the machine is as follows: A keg or barrel, f^2, (see Fig. 1,) being placed on the endless cables or cords c' c^2, and the crank arm or handle c^3 turned in the direction of the arrow i will give a rapid movement to the cables in the direction of the arrow i'. This operation would cause the barrel to move rapidly along the whole length of the machine in the same direction and then off but for the belt d and its small rollers e. The belt d moves only one notch while the pulleys c make one entire revolution, so that, as will be seen, the cables move much faster than the belt d with its small wheels, and consequently when the barrel is put onto the cables it runs against the small wheels or rollers and there revolves rapidly while it advances along the machine only as fast as the small rollers and belt d will permit.

By this means the barrel is kept revolving a sufficient length of time to permit the pitch to become cool enough to stay on the interior surface of the barrel without running, after which it is delivered from the machine in any well-known way.

It will be seen that a barrel may be put on

the machine between each of the series of small rollers, so that six or more may be running on the machine at once, according to its size.

I claim as my invention—

In a machine for rolling barrels after being pitched, the endless cables, substantially as specified, mounted on pulleys upon the frame *a* and having a crank for operating them, in combination with the endless belt *d* and rollers e^4, mounted on rollers set in bearings in the frame of the machine, the shaft d^3 being provided with a ratchet operated by a pawl and crank on the shaft a^5, whereby a rapid rotary movement is given to a barrel while it advances slowly along over the machine, substantially as described.

FREDERICK X. KUHN.

Witnesses:
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