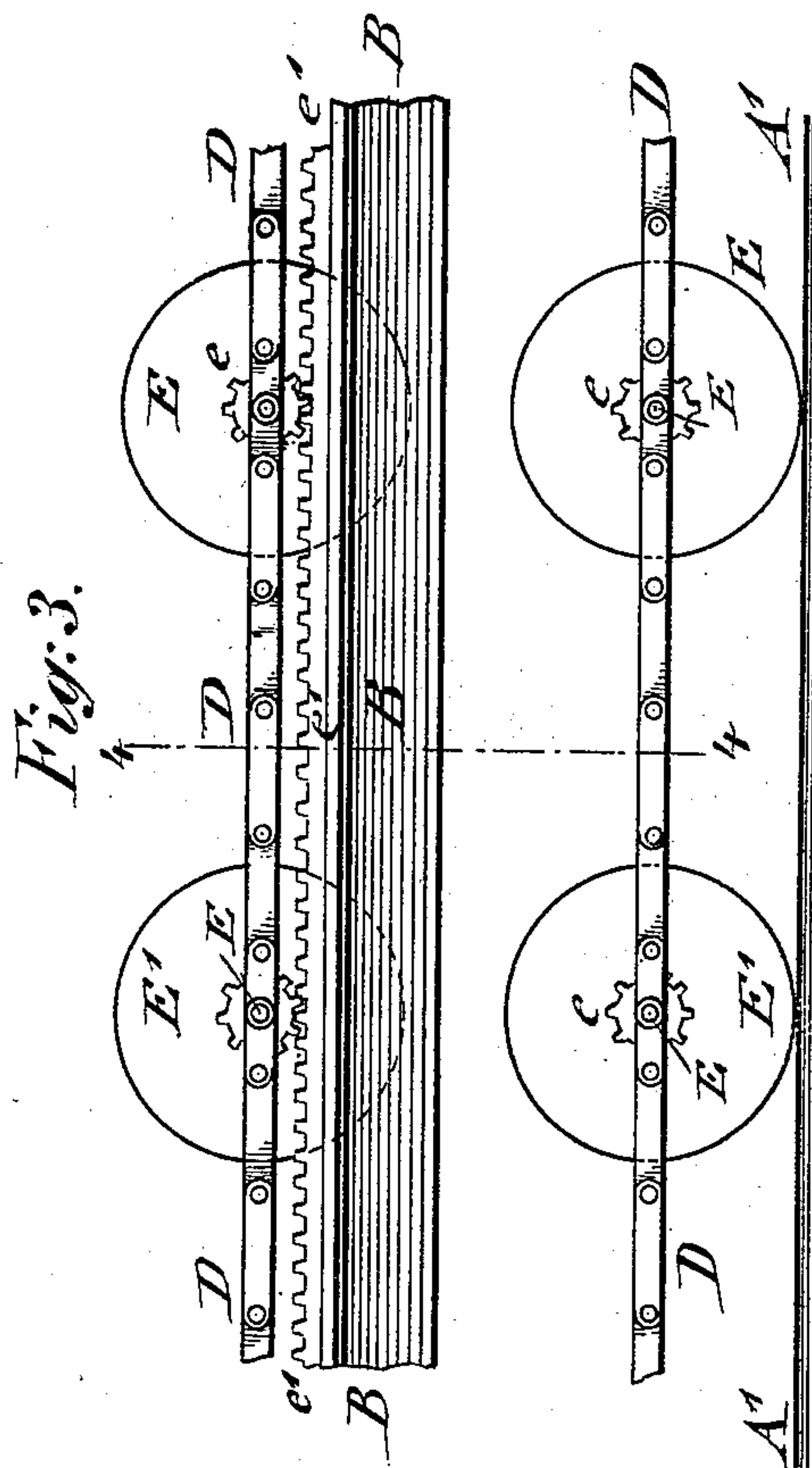
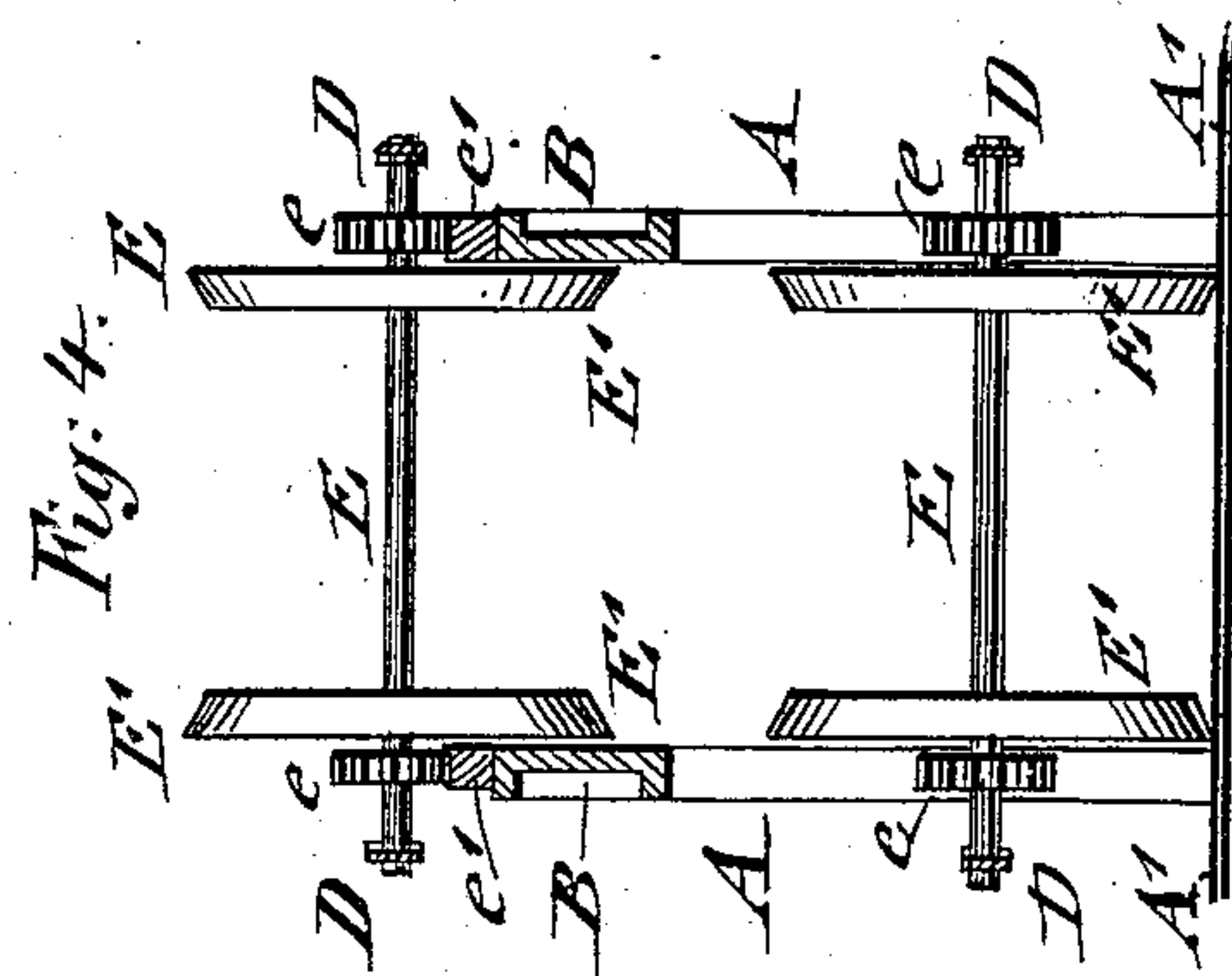
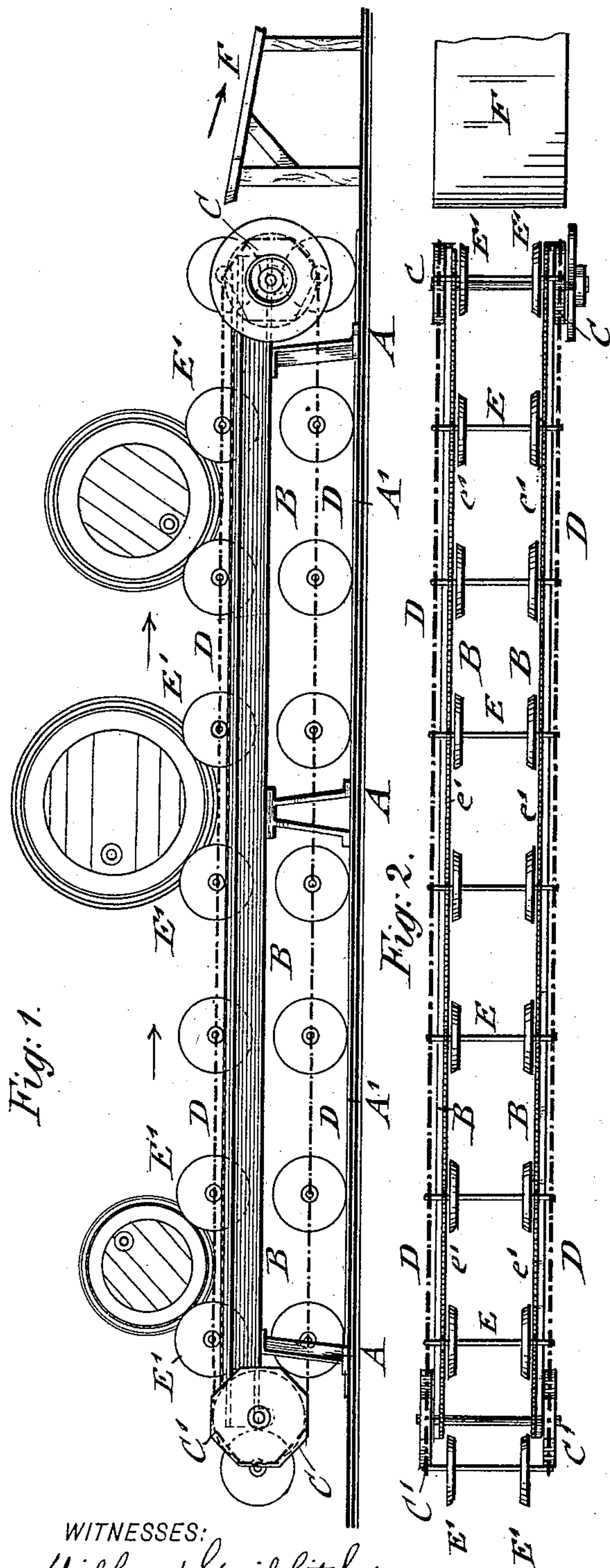


(No Model.)

W. ARNEMANN.  
KEG ROLLING MACHINE.

No. 518,389.

Patented Apr. 17, 1894.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILHELM ARNEMANN, OF HAMBURG, GERMANY.

## KEG-ROLLING MACHINE.

SPECIFICATION forming part of Letters Patent No. 518,389, dated April 17, 1894.

Application filed December 7, 1892. Serial No. 454,332. (No model.) Patented in Germany December 13, 1888, No. 47,450.

*To all whom it may concern:*

Be it known that I, WILHELM ARNEMANN, a citizen of the United States, residing in Hamburg, in the Empire of Germany, have invented certain new and useful Improvements in Keg-Rolling Machines, (for which Wilhelm Ritter has obtained a patent in Germany, No. 47,450, dated December 13, 1888, by my knowledge and consent,) of which the following is a specification.

This invention has reference to certain improvements in keg-rolling machines for breweries, by which the kegs are not only moved from one end of the machine to the other, but simultaneously rotating on their axis, so that the hot coating of pitch that has been given by the pitching machine to the interior surface of the kegs is evenly distributed over said surface and gradually dried and cooled during the passage of the kegs over the rolling machine; and the invention consists of a keg-rolling machine which comprises endless chains, driving drums at one end of said endless chains, guide-drums at the opposite end of the same and a number of keg-supporting rollers, the shafts of which are guided on longitudinal rails and simultaneously rotated on their axis by means of suitable mechanisms so that the kegs supported on two adjacent pairs of rollers are rotated on their axis while being conveyed from one end of the pitching machine to the other end of the same.

In the accompanying drawings, Figure 1 represents a side-elevation of my improved keg-rolling machine. Fig. 2, is a plan-view of the same, and Fig. 3 is a side elevation of a portion of keg-rolling machine, drawn on a larger scale, and Fig. 4, is a vertical transverse section, on line 3 3 Fig. 1.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents upright standards which are supported in suitable base-rails A' on the floor of the brewery or other building. The standards A are connected by two longitudinal beams B. The end-standards A are provided with suitable bearings which support at one end the axle of two driving drums C and at the other end the axle of two guide-drums C'. The axle of the driving-drums C is connected by suitable motion transmitting with a counter-shaft so

as to receive a slow rotary motion. The driving and guiding drums are preferably made octagonal in shape or of any other polygonal form as desired. Two endless chains D are stretched over the driving and guiding drums C C' the links of the chains being engaged by the sides of the drums which are in the nature of sprocket wheels, so as to transmit continuous motion to the endless chains D. The endless chains D are connected at certain intervals with transverse shafts E, to each of which a pair of rollers E' is keyed, said rollers being slightly beveled at their circumferences so as to support the kegs that are to be rolled on the machine. The shafts E extend over and beyond the upper parts of the beams B. Each shaft E is provided near each roller E' with a pinion e which meshes with a longitudinal rack e' that is attached to the top-part of the beam B so that each shaft and the rollers keyed to the same receive rotary motion on their axis while they are conveyed by the endless chains D over the beams B. The kegs, which are placed in position on two adjacent pairs of rollers, are conveyed by the chains D away from the pitching machine located near one end of the rolling-machine and simultaneously rotated on their axes by the axial motion imparted to the roller-shafts E by the racks and pinions e' e.

The keg-rolling machine is made of sufficient length so that when the keg is conveyed over the same, the coating of pitch in the same is uniformly distributed over the entire interior surface of the keg and gradually cooled and dried. When the keg arrives at the opposite end of the rolling machine it is conveyed over an inclined plane F to the place of use.

The rolling of the kegs and the conveying of the same from the machine to the place of use is accomplished in a perfectly automatic manner without requiring the handling of any keg while they are in transit from one end of the machine to the other, or while they are conveyed over the inclined plane to the place of use or to a keg-elevator or other device as may be required. The rollers are moved over the driving-drums C and are returned at the lower part of the machine over the base-rails of the machine and over the guide-drums C' where the pitched kegs are



placed on the machine. A continuous operation of the machine is thus secured and thereby a considerable amount of time and labor saved in rolling and conveying the kegs. In place of the racks and pinions by which axially-rotating motion is imparted to the kegs, any other equivalent mechanism such as rails and friction-pulleys and the like may be employed.

10 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A keg-rolling machine, consisting of endless chains, rotary driving drums at one end  
15 of said chains, guide-drums at the opposite ends of the chains, a number of transverse shafts attached to said endless chains, rollers on said shafts for supporting the kegs and means, substantially as described, whereby  
20 simultaneously with the continuous forward motion imparted to the shafts, an axially-ro-

tary motion is imparted to the same, substantially as set forth.

2. A keg-rolling machine, consisting of supporting standards, longitudinal beams connecting said standard, driving drums at one  
25 end of said beams, guide-drums at the opposite ends of the same, endless chains supported on said drums, transverse shafts attached to said endless chains, rollers on said  
30 shafts, pinions on said rollers and racks supported on said beams, so that simultaneously with the forward motion of said rollers a rotary motion on their axis is imparted to the  
35 same, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

WILHELM ARNEMANN.

Witnesses:

PAUL GOEPEL,  
CHARLES SCHROEDER.