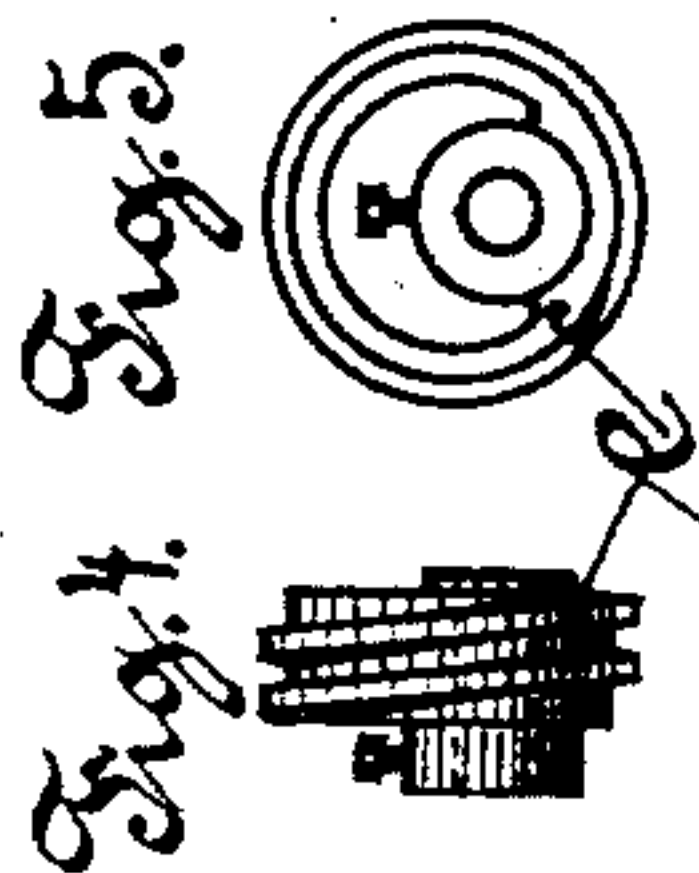
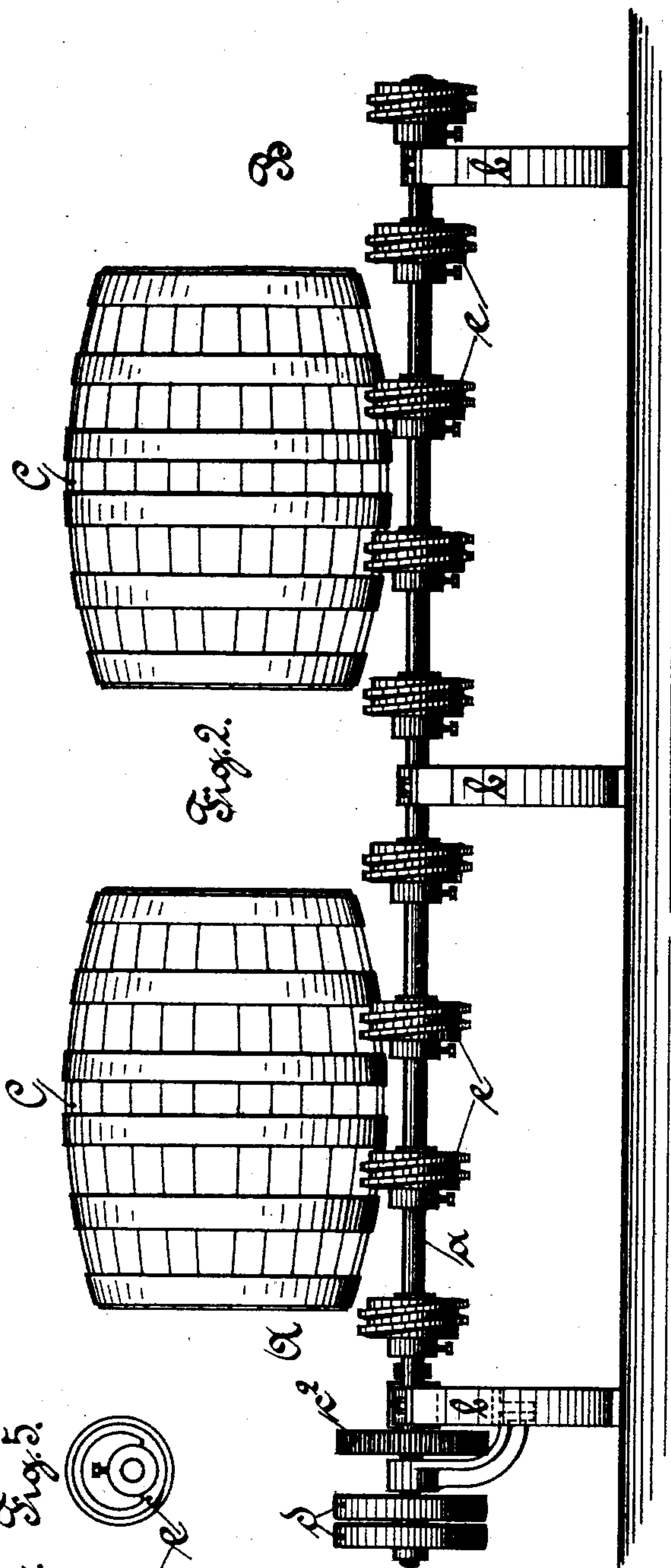
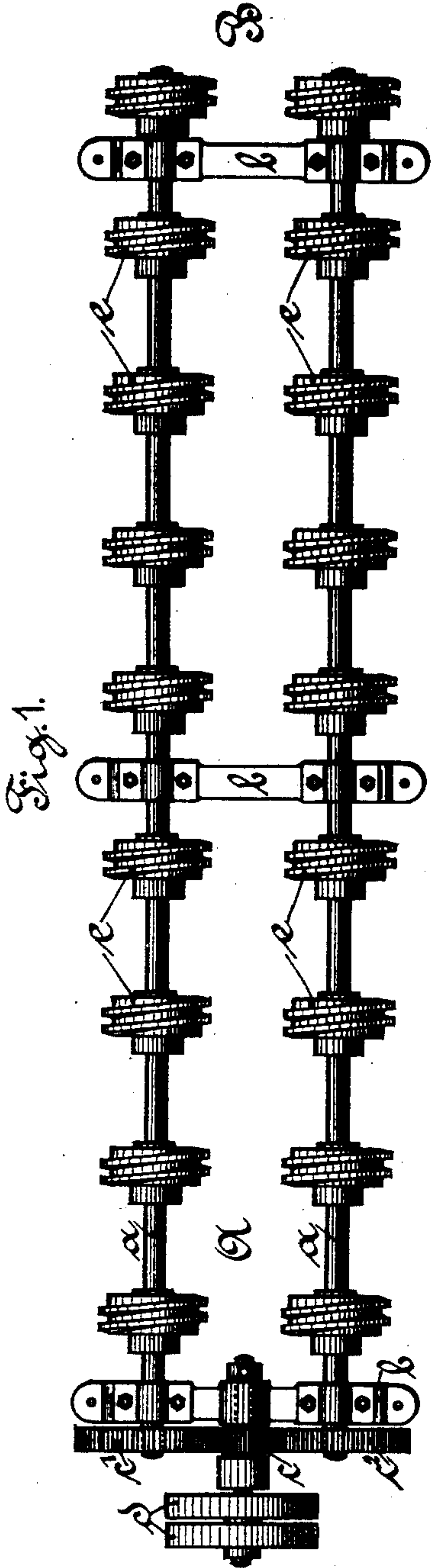


(No Model.)

L. P. K. HEYLIGENSTAEDT.
MACHINE FOR ROLLING CASKS.

No. 520,205.

Patented May 22, 1894.



Witnesses:
H. K. Boulter
A. Shorthuf

Inventor:

Louis P. K. Heyligenstaedt,
by Wm. E. Boulter, attorney.

UNITED STATES PATENT OFFICE.

LOUIS PAUL KASIMIR HEYLIGENSTAEDT, OF GIESSEN, GERMANY.

MACHINE FOR ROLLING CASKS.

SPECIFICATION forming part of Letters Patent No. 520,205, dated May 22, 1894.

Application filed November 28, 1893. Serial No. 492,223. (No model.) Patented in Germany January 7, 1892, No. 64,121, and in Austria-Hungary March 6, 1893, No. 48,715 and No. 83,581.

To all whom it may concern:

Be it known that I, LOUIS PAUL KASIMIR HEYLIGENSTAEDT, a subject of the Emperor of Germany, residing at Giessen, in the Empire of Germany, have invented certain new and useful Improvements in Machines for Rolling Casks and the Like, (for which Letters Patent have been obtained in Germany, No. 64,121, dated January 7, 1892, and in Austria-Hungary, No. 48,715 and No. 83,581, dated March 6, 1893,) of which the following is a description.

The object of the present invention is to impart to round, roller or barrel shaped bodies a movement of rotation round their own axis and simultaneously an axial displacement, the apparatus being particularly applicable for the rolling of freshly pitched casks, in order to effect an equal distribution of the still liquid pitch. The machine can however be also used in other cases, where the transport of round bodies (*e. g.* bales of goods) is concerned.

A special feature of this machine is that by it not only a rolling motion, as is the case with the older machines, is imparted to the casks, &c., but also a longitudinal displacement as already mentioned. This peculiarity is based on the employment of worms instead of plain rollers—the worms in their revolution engaging with the object placed upon them and driving it forward.

In the accompanying drawings Figure 1 is a plan and Fig. 2 a side elevation of such a machine. Fig. 3 is an end view of one of the worms. Figs. 4 and 5 are side and end elevations of an eccentric worm which will receive further explanation later on.

Two parallel shafts *a a* are mounted in suitable frames *b* and are driven by gear wheels *c c' c''* and pulleys *d* or in any other suitable manner. Upon these shafts are placed at suitable intervals and opposite each other the worms *e e* being keyed upon the shafts or secured on them in any other suitable manner. As the shafts *a a* are driven in opposite directions to each other, the helicoidal ribs of the worms *e e* engaging the ob-

jects *e. g.* casks *C* placed in the machine at the end *A* convey them on to the end *B*. In this operation both a rotatory movement of the casks *C* about their longitudinal axis, as well as a longitudinal displacement, is caused, so that the workman has merely to put on barrels at *A* which roll off from the machine at *B*.

If besides being rolled and transported the barrels are further to receive a rocking or shaking motion—such as would be of help in the distribution of the fresh pitch throughout the barrel, the worms *e* Figs. 4 and 5 instead of being bored centrally as in Fig. 3, are bored eccentrically. It is easy to comprehend that the rotation of these eccentric worms will cause a continuous rising and falling and rocking of the casks.

The arrangement of the machine may be varied, the position of the shafts carrying the worms especially admitting of being varied according to requirements.

What I claim, and desire to secure by Letters Patent, is—

1. In a machine of the class described, a series of rotatable shafts each provided with a series of eccentric worms adapted to support an object and to revolve and advance the same longitudinally of the shafts and simultaneously impart a shaking or rocking motion to the object when the shafts are rotated in the manner described.

2. In a machine of the class described, the combination of a series of parallel shafts, a series of worms eccentrically mounted thereon and provided with circumferential helicoidal ribs, adapted to support an object and to revolve and advance the same longitudinally of the shafts and simultaneously impart a shaking motion to the object when the shafts are rotated, gear wheels mounted on one end of the shafts an intermediate gear wheel meshing with the gear wheels on the shafts, and means for rotating the said intermediate gear wheel as described.

LOUIS PAUL KASIMIR HEYLIGENSTAEDT.

Witnesses:

FRIEDRICH MAY,
KARL REIT.