

No. 776,010.

PATENTED NOV. 29, 1904.

E. BOUSSE.
ENDLESS ELEVATOR.

APPLICATION FILED APR. 22, 1903.

NO MODEL.

2 SHEETS—SHEET 2.

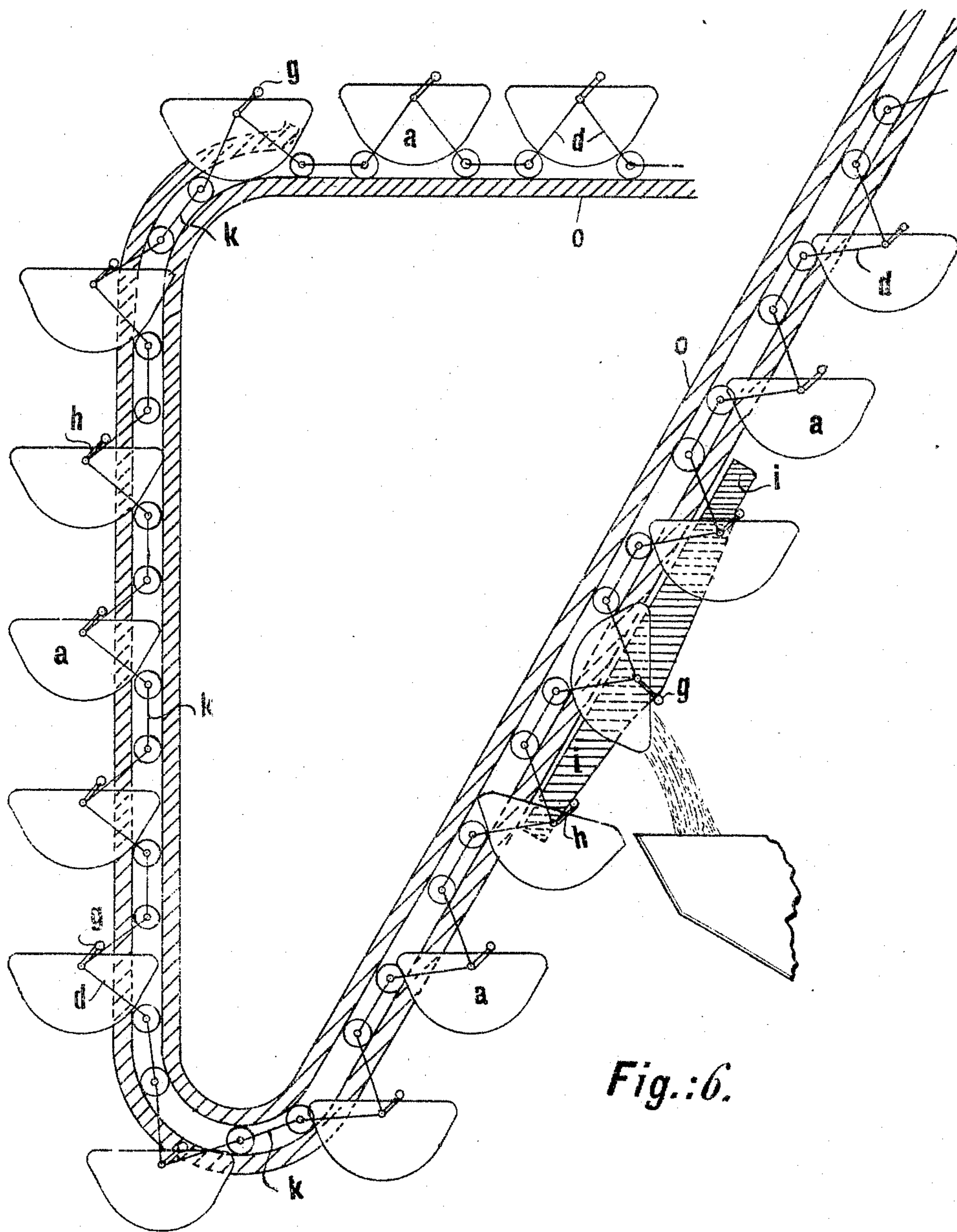


Fig.:6.

Witnesses:
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UNITED STATES PATENT OFFICE.

EMIL BOUSSE, OF DARMSTADT, GERMANY.

ENDLESS ELEVATOR.

SPECIFICATION forming part of Letters Patent No. 776,010, dated November 29, 1904.

Application filed April 22, 1903. Serial No. 153,869. (No model.)

To all whom it may concern:

Be it known that I, EMIL BOUSSE, chief engineer, a subject of the King of Prussia, German Emperor, residing at No. 43 Victoriastrasse, Darmstadt, in the Grand Duchy of Hesse, German Empire, have invented certain new and useful Improvements in Endless Elevators, of which the following is a full, clear, and exact description.

10 This invention relates to an endless bucket conveyer the arrangement of which makes it possible to convey the goods in all directions—that is to say, both in vertical and horizontal planes and curves—whereby the bucket may
15 be loaded or unloaded at any point of its path of travel. It is true that bucket conveyers are already known in which the same object may to a limited extent be obtained; but the construction of these conveyers is much more
20 complicated than that of the present invention, in which a plurality of features are combined in such a manner that great simplicity is obtained.

25 The present invention has, further, the advantage of preventing tilting of the bucket during the loading of the same in a vertical plane, by reason of the great lateral projection of the bucket from the path of movement of the axles.

30 In the drawings, Figure 1 is a side elevation of one of the conveyer-buckets. Fig. 2 is a top plan view of one of the buckets, showing parts broken away and parts in dotted lines. Fig. 3 is a diagrammatic view of a portion of a conveyer, showing how the buckets
35 are dumped. Fig. 4 is a diagrammatic view showing the buckets in various horizontal and vertical positions. Fig. 5 is a diagrammatic view showing the buckets turning a horizontal curve. Fig. 6 is a diagrammatic
40 view showing the bucket being dumped while upon an inclined plane.

Referring more particularly to the drawings, *a* indicates a bucket suitably journaled
45 by pintles *b* at *c* in two frames *d*. These frames *d* are connected together by a plural-

ity of axles *e*, which carry the wheels *e'* and are of triangular form, so that the bucket is positioned to one side of the line of the draft of the conveyer, which makes it possible to
50 swing three hundred and sixty degrees, so as to dump or fill with ease the bucket at any place of its travel. A brace *n* connects the axles of each truck or unit.

The conveyer units or trucks are connected
55 together by links *h*, which are provided with hinges *l* to permit the units to turn relatively in one direction and are journaled on the axles *e* to permit them to turn relatively in the other
60 direction.

The pintles *b* of the buckets *a* are provided with arms *h*, carrying rollers *g*, adapted to ride over cam-faces positioned at any desired place along the travel of the conveyer to dump
65 the buckets.

The wheels *e'* travel upon a track *o*. This track may consist of two parts where the conveyer moves through vertical or inclined positions, as shown in Figs. 4 and 6, one on each
70 side of the wheels, so that it is supported on both sides.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

In a bucket conveyer, the combination of a
75 plurality of units each comprising a plurality of axles one in advance of the other, a pair of side frames by which the axles are carried, extending laterally to the line of travel of the
80 axles, wheels on the axles and a bucket mounted on the frame to swing three hundred and sixty degrees on one side of the axles; and means connecting the units together permitting the travel of the units in horizontal and
85 vertical planes and curves.

In witness whereof I subscribe my signature in presence of two witnesses.

EMIL BOUSSE.

Witnesses:

JEAN GRUND,
CARL GRUND.