A. SOMMER.

COAL DISTRIBUTING APPARATUS.

APPLICATION FILED AUG. 25, 1909.

952,020. Patented Mar. 15, 1910.

Fig. 1.

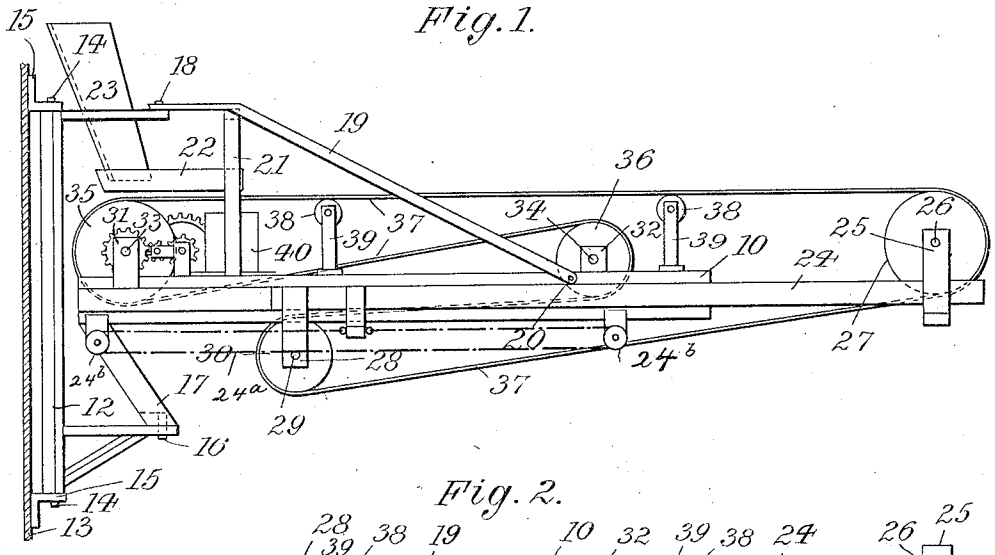


Fig. 2.

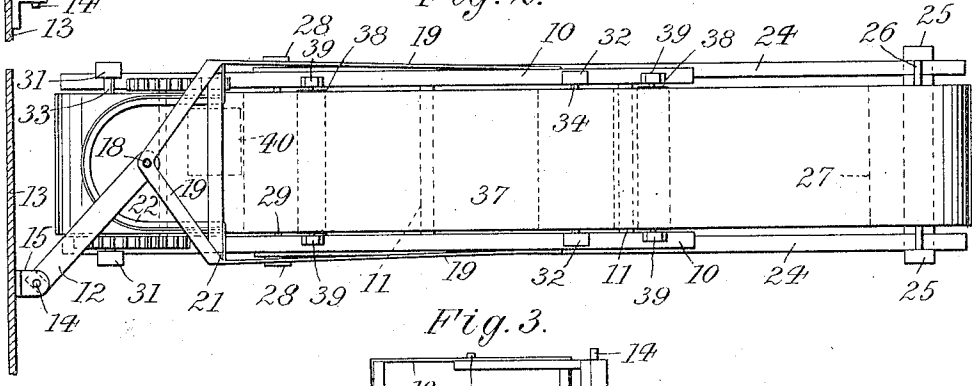
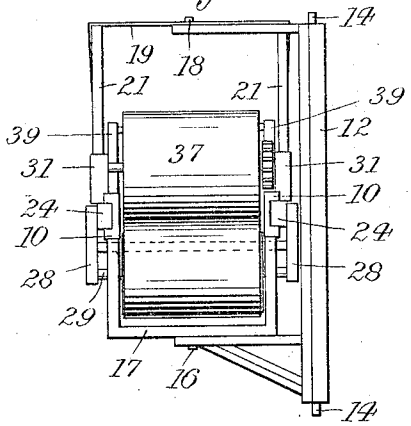


Fig. 3.



Witnesses:
Arthur E. Gumpp.
W. R. Schultz.

Inventor
August Sommer
By his Attorney
Frank P. Briesen

UNITED STATES PATENT OFFICE.

AUGUST SOMMER, OF HOBOKEN, NEW JERSEY.

COAL-DISTRIBUTING APPARATUS.

952,020. Specification of Letters Patent. Patented Mar. 15, 1910.

Application filed August 25, 1909. Serial No. 514,501.

To all whom it may concern:

Be it known that I, AUGUST SOMMER, a citizen of Germany, residing at Hoboken, Hudson county, State of New Jersey, have invented new and useful Improvements in Coal-Distributing Apparatus, of which the following is a specification.

This invention relates to an apparatus which permits coal to be readily loaded into vessels by distributing it in a simple and reliable manner to the various dumps desired.

In the accompanying drawing: Figure 1 is a side elevation of my improved coal distributing apparatus; Fig. 2 a plan with the chute omitted, and Fig. 3 a left hand end view with the brackets omitted.

The apparatus comprises essentially a frame adapted to be swung in a horizontal direction and made extensible, so as to reach dumping places located at various distances from the port hole through which the coal is introduced. The frame carries an apron or conveying belt which is so hung as to be distended or contracted with the frame, and which, on being driven by a suitable motor, delivers the coal at a point beneath the end of the frame.

The frame is composed of a pair of longitudinally grooved rails 10 connected to each other by cross-ties 11 to constitute a track. This track is freely suspended and is adapted to be swung on a vertical axis in a horizontal plane by being pivoted to a yoke 12 which is, in turn, pivoted to the ship's hull 13 at one side of the port hole, (not shown). Yoke 12 is provided with gudgeons 14 turning in brackets 15 secured to hull 13. The yoke straddles the end of the frame, and to its lower arm is fulcrumed at 16 a foot 17 depending from rails 10. To the upper yoke-arm is fulcrumed at 18 a U-shaped brace 19 secured at 20 to rails 10 in proximity to the free ends thereof and attached to the upper ends of posts 21 projecting upwardly from said rails. To these posts is also secured a guard 22 within which the coal chute 23 opens.

Along rails 10 are guided a pair of slides 24 which on being drawn in or out, by chain 24^a and chain wheels 24^b, shorten or lengthen the aggregate size of the frame. From the outer ends of slides 24 extend upwardly bearings 25 in which is journaled the shaft 26 of an upper drum 27. In like manner, there depend from the inner ends of slides 24 a pair of hangers 28 carrying the shaft 29 of a lower drum 30. From opposite ends of rails 10 there extend upwardly bearings 31, 32 in which are journaled the shafts 33, 34, respectively, of a pair of drums 35, 36. An endless apron 37 is laid in the following manner around the four drums above referred to: From top of drum 35 it passes around back of drum 27, thence around front of drum 30, thence around back of drum 36, and finally around front of drum 35.

By the construction described, the upper operative run of the apron will be automatically lengthened and shortened in conformity with the lengthening and shortening of the frame carrying said apron. That is to say, if slides 24 are pushed outward, the additional length required for the upper run of the apron is contributed by the decrease in size of the lower apron fold located between drums 30 and 36, such drums approaching at a ratio corresponding to that at which drums 35, 27 recede. The converse is obviously the case when slides 24 are pushed inward. To prevent the upper apron run from sagging, it is supported upon a number of idlers 38 journaled in posts 39 that project from rails 10 at opposite sides of drum 36. Continuous forward motion is imparted to apron 37 by a motor 40 mounted upon rails 10 and suitably intergeared with shaft 33 of drum 35.

In use, the device is swung on gudgeons 14 below the port hole, the motor is started and the coal falling through chute 23 upon apron 37 is delivered to the various dumps desired by swinging the device sidewise on pivots 16, 18, and also by drawing slides 24 in or out, as will be readily understood.

When the apparatus is out of use, it is folded on gudgeons 14 against the side of the ship, so as to be out of the way.

I claim:

A device of the character described, comprising a bracket, a yoke pivotally secured

thereto, a first frame-section straddled by the yoke, means for pivotally connecting said frame-section to said yoke, so as to be rotatable on a vertical axis, a second frame-section slidably engaging the first frame-section, and an extensible apron carried by both frame-sections.

Signed by me at New York city, (Manhattan,) N. Y., this 24th day of August, 1909.

AUGUST SOMMER.

Witnesses:
FRANK V. BRIESEN,
W. R. SCHULZ.