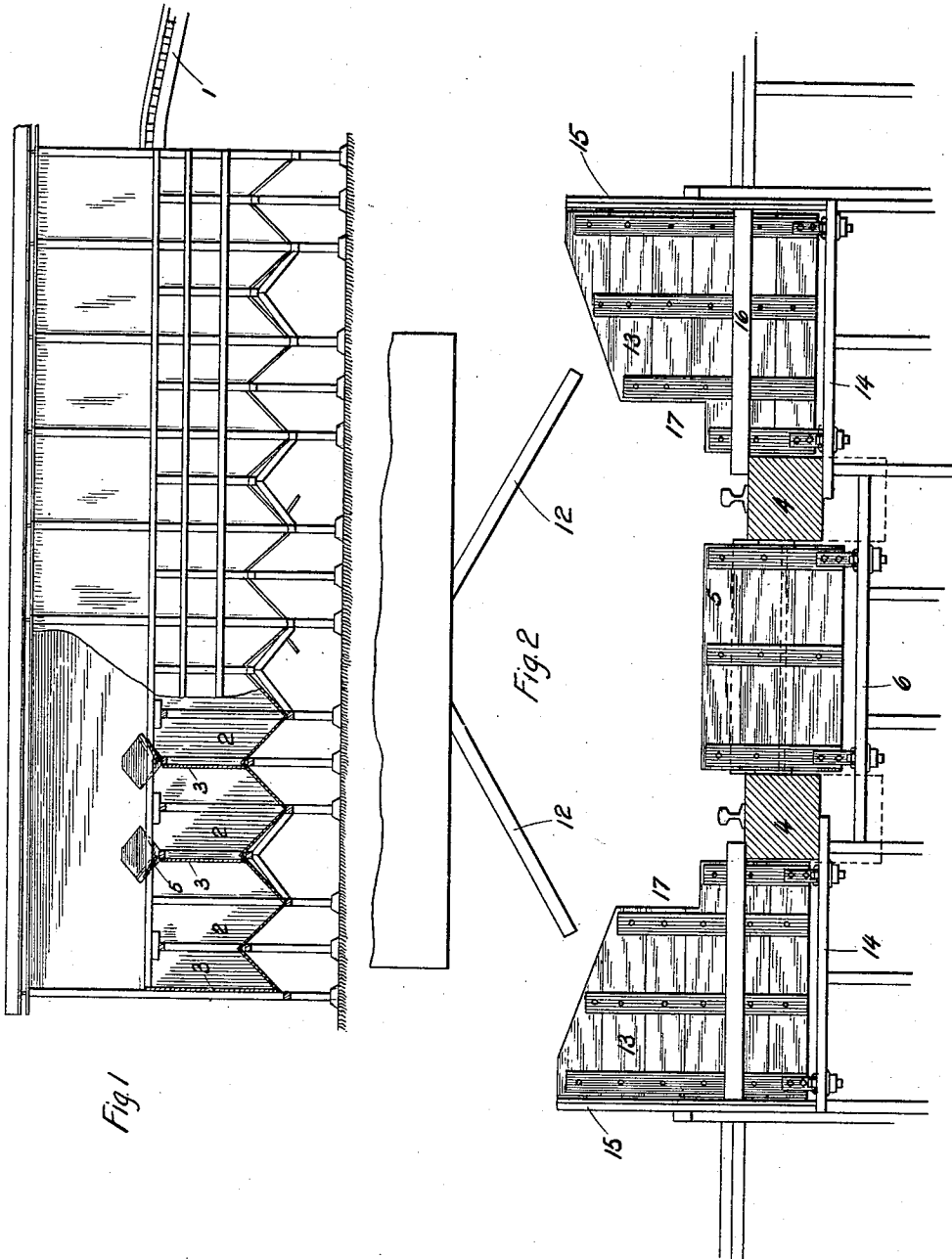


J. M. SNEAD.
 COAL STORING APPARATUS.
 APPLICATION FILED MAR. 26, 1909.

1,008,085.

Patented Nov. 7, 1911.
 2 SHEETS—SHEET 1.



Witnesses:
C. Durnap
Henry Parks

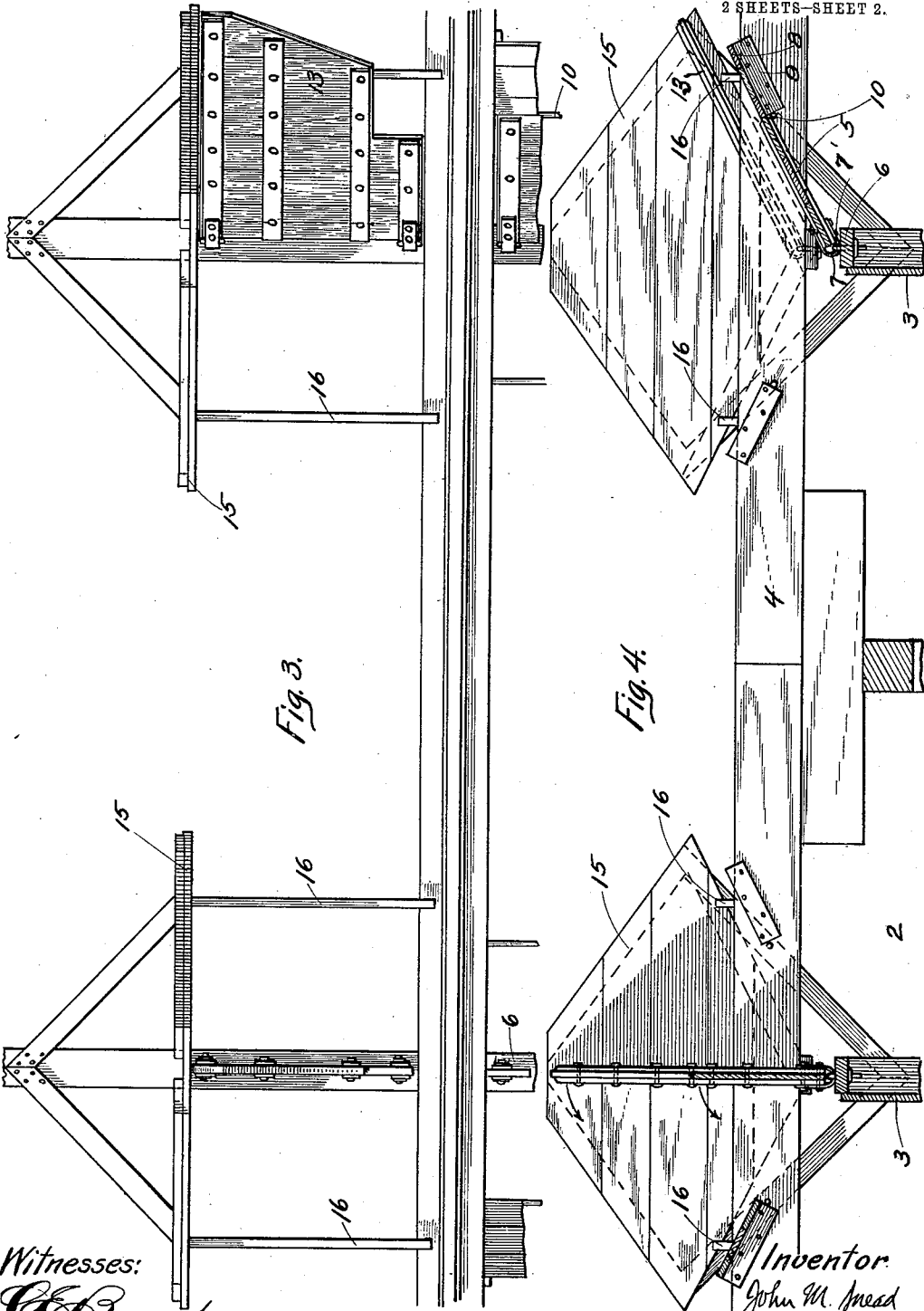
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John M. Snead
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 By
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C. Burnap
Henry A. Parks

Inventor:
John M. Snead
By *Meidan, Williams & Scott* Attys

UNITED STATES PATENT OFFICE.

JOHN M. SNEAD, OF CHICAGO, ILLINOIS, ASSIGNOR TO GRAVITY COAL BIN COMPANY,
A CORPORATION OF MAINE.

COAL-STORING APPARATUS.

1,008,085.

Specification of Letters Patent.

Patented Nov. 7, 1911.

Application filed March 26, 1909. Serial No. 485,958.

To all whom it may concern:

Be it known that I, JOHN M. SNEAD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Coal-Storing Apparatus, of which the following is a specification.

The object of my invention is to provide a compact arrangement of compartments or bins adapted to receive coal or other lading discharged from dump cars, my improved structure being more especially designed for coöperation with cars provided with drop bottoms. In cars of this type the floor is composed largely—in some instances substantially wholly—of drop doors. The operating mechanism whereby such doors are closed and opened is generally constructed in four sections, each section coöperating with the doors upon one side of the car extending from the end to the center thereof. These cars, as ordinarily constructed, are about forty feet in length, and the operation of one section of the dumping mechanism, therefore, results in discharging the contents of the car throughout about twenty feet of the length thereof. In plants for receiving coal from cars, it is desirable to provide a series of bins or compartments beneath the track in position to receive the coal or other material directly from the cars when dumped.

In order to receive the lading discharged from dump cars of the type above described, it is necessary that each bin extend longitudinally of the track a distance of at least twenty feet in order that the material dumped may be all received in a single bin, this being necessary in order to avoid mixing different shipments, or different grades of coal or other material. It is desirable, however, in order to secure compactness and economy of construction, to limit the size of the bins, thus rendering it possible to place a larger number of bins in a given length of track. Generally speaking, I accomplish this purpose by constructing each bin of less length than would be necessary to receive the contents dumped from half the length of a drop bottom car of the type above described, and mount deflectors or aprons upon the partitions dividing the bins, such deflectors being adjustable to slope in either direction from said partitions, and acting

as a funnel or hopper to direct the lading into the proper bin. The manner in which I apply this idea and the objects and advantages of my invention will appear from the following description and claims, taken in connection with the accompanying drawings, in which—

Figure 1 is a side view, partially in section, of a series of bins constructed according to my invention. Fig. 2 is a transverse section, taken upon the dividing line between two adjacent bins, the deflecting aprons being shown in intermediate vertical position. Fig. 3 is a fragmentary plan view, and Fig. 4 is an elevation of the structure shown in Fig. 3, the parts being shown in central section.

In the particular embodiment of my invention illustrated, the railway track is carried upon an elevated trestle provided with an inclined approach 1. Beneath the trestle there is a series of bins 2 separated by partitions 3 extending transversely of the elevated track. The elevated part of the track is supported upon longitudinal stringers 4 leaving a clear dumping space between and outside of the rails.

At the upper edge of each of the transverse partitions 3, I mount an adjustable apron 5, the same being shown in the present instance as pivoted to the timber 6, by means of coacting straps 7 and 7' bolted, respectively, to the apron and timber. Extending transversely between the stringers 4 are stationary apron sections 8 consisting, in the present instance, of boards secured to cleats 9 which in turn are fastened to the inner faces of the stringers 4. The stationary apron sections 8 form prolongations of the adjustable aprons 5 when the latter are thrown to either side, and the use of the stationary apron sections lessens the necessary width of the adjustable sections, thereby rendering it possible to turn them from one adjustable position to another when a car is on the trestle. Any suitable stops may be provided for supporting the aprons 5 when adjusted to operative position. In the present instance they are shown at the left of Figs. 3 and 4 as resting upon the tie rods 10 which extend between the stringers 4.

In Fig. 2, the lower portion of a car in operative relation to the dumping apparatus is diagrammatically shown. In this view it will be apparent that a large amount of

the material escaping over the open doors 12 will fall outside of the track rails. I have, therefore, provided aprons 13 pivoted at their lower edges to the timbers 14 and extending outwardly from the stringers 4 to stationary deflectors 15 which extend longitudinally of the track. The aprons 13, like the aprons 5, may be turned to slope either way from the partitions between the bins, and in their operative position they rest upon stops 16, which in the construction illustrated take the form of timbers extending from the stringers 4 to the deflectors 15. The inner upper corners of the aprons 13 are cut away, as shown at 17, to afford clearance for the trucks and other parts of the cars.

While I have illustrated my invention in connection with an elevated trestle having bins beneath, and passages below the bins, into which the bins may be discharged into wagons or other vehicles, it is apparent that my improved construction is equally applicable to dumping bins of any construction placed beneath a railway track. My improved construction renders it possible to reduce the width of bins receiving their contents from dump cars of the type referred to above from about twenty feet to fourteen feet or less. In this way a large economy is effected in the construction of coaling stations, both by reducing the amount of land necessary and by reducing the size of the bins.

I would have it understood that I do not desire to limit myself to the precise construction and arrangement of parts shown in the drawings and herein described, as various modifications or alterations may be made without departing from my original invention.

I claim:

1. In a device of the class described, compartments or bins, and aprons at the top thereof, said aprons being adjustable to converge in pairs toward either of said bins.
2. In a device of the class described, a

plurality of bins side by side, and aprons above the dividing partitions between said bins, said aprons being adjustable to slope in either direction from said partitions.

3. In a device of the class described, a railway track disposed in a manner to support a car in dumping relation to bins, a series of bins beneath said track, and aprons above the dividing partitions between said bins, said aprons being adjustable to slope in either direction from said partitions.

4. In combination, a railway track, longitudinal stringers supporting said track, a series of bins beneath said stringers, aprons above the dividing partitions between said bins, said aprons being adjustable to slope in either direction from said partitions, and stationary aprons extending between said stringers and forming a continuation of said adjustable aprons when the latter are in operative position.

5. In combination, a railway track, longitudinal stringers supporting said track, a series of bins beneath said stringers, and aprons above the dividing partitions between said bins and extending between said stringers and from said stringers outwardly, said aprons being adjustable to slope in either direction from said partitions.

6. In combination, a railway track, longitudinal stringers supporting said track, a series of bins beneath said stringers, aprons above the dividing partitions between said bins and extending between said stringers and from said stringers outwardly, said aprons being adjustable to slope in either direction from said partitions, and deflectors extending longitudinally of said track at the outer edges of said outwardly extending aprons.

In testimony whereof, I have subscribed my name.

JOHN M. SNEAD.

Witnesses:

WALTER A. SCOTT,
HENRY A. PARKS.