G. A. FALL.

Coal-Slide or Chute.

No. 212,915 Patented Mar. 4, 1879.

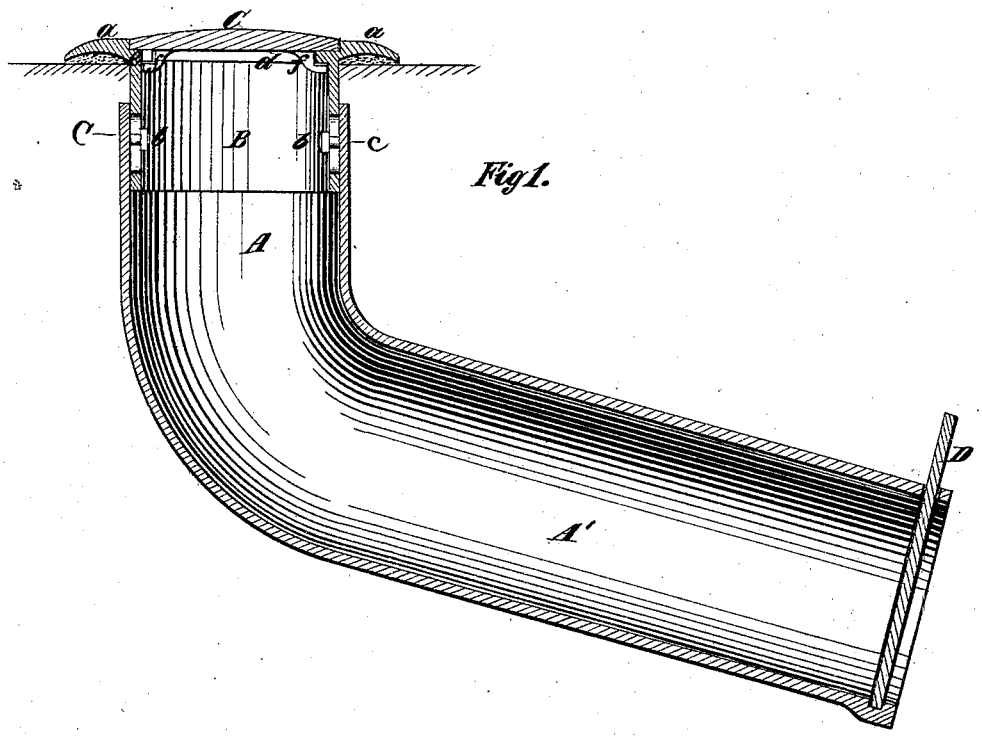
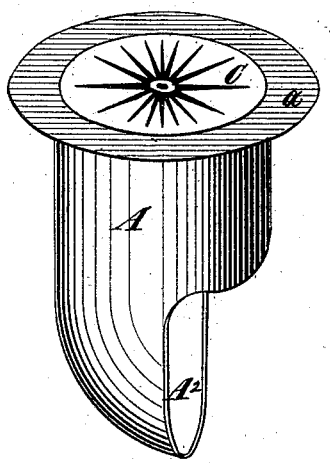


Fig 1.

Fig 2.



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UNITED STATES PATENT OFFICE.

GEORGE A. FALL, OF HOBOKEN, NEW JERSEY.

IMPROVEMENT IN COAL SLIDES OR CHUTES.

Specification forming part of Letters Patent No. **212,915**, dated March 4, 1879; application filed November 15, 1878.

To all whom it may concern:

Be it known that I, G. A. FALL, of the city of Hoboken, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Coal Slides or Chutes, of which the following is a specification:

My invention consists in a coal slide or chute composed of a vertical branch and a slanting portion or section for communicating with a cellar.

It also consists in a coal slide or chute made of cast-iron, and composed of a vertical section provided with a flange and a slanting portion, for communicating with a cellar.

It also consists in the combination, with such a device, of an extensible or compensating section, whereby provision is afforded for the use of the said device in connection with cellars located at different distances below the street-level.

It also consists in the combination, with such a device, of a gate at the inner end, whereby the said device is enabled to serve as a measure for coal passed through it, and is also enabled to be used for feeding coal into a barrel or wheelbarrow for conveyance to a remote part of the cellar, thus obviating unnecessary shoveling of the coal for that purpose.

It also consists in details of construction hereinafter explained.

In the accompanying drawings, Figure 1 is a central vertical section of a coal slide or chute embodying my improvements, and Fig. 2 is a perspective view of a modified form thereof.

Similar letters of reference designate corresponding parts in all the figures.

A A′ represent the coal slide or chute, which consists, in the present instance, of a vertical section, A, and a slanting section, A′, inclined to the horizontal. Preferably it is made cylindric in form, as it then offers less resistance to the passage of coal through it. The two said sections are joined by a curved elbow, as it were, so as also to facilitate the passage of the coal. It is made of cast-iron, and may be made of a single piece and of such proportions that, when the upper end is on a level with the sidewalk or other suitable part of the street or grounds adjacent to the cellar with which it is to be used, the lower end will be in convenient proximity to the cellar.

It will be understood, that inasmuch as a slide or chute of this character presents a much smoother surface to the coal than one of the ordinary slides or chutes built of masonry, the slant necessary for the delivery of the coal through it need not be near so abrupt as in the mason-work slides or chutes; and that, for such reason, this slide or chute invented by me can be used with very great advantage where the sidewalk is very slightly removed from the bottom of the cellar.

B designates what I term an "extensible or compensating section." It is shown as of cylindric form, fitted inside the vertical section A of the slide or chute A A′, and provided at the upper end with a laterally-extending flange, *a*, adapted to overlap the sidewalk or other ground adjacent to the cellar, so as to preclude the leakage of water around the outside of the same. The under side of this flange is preferably concave, in order that a packing of cement or other suitable material may be inclosed between it and the sidewalk or other ground, the better to obviate leakage around it. This extensible or compensating section enables slides or chutes of one size embodying my invention to be used in connection with cellars which are different distances from the sidewalk or adjacent grounds, because it can be slid farther in or out to compensate for variations in such distance. It may be secured in place within the vertical section of the chute in any suitable manner—such, for instance, as by bolts *b*, or their equivalents, passing through slots *c* therein and inserted into the said slide or chute.

In some cases where the cellar is close to the sidewalk-opening, but not quite under it, a chute of the form represented in Fig. 2 may prove sufficient.

It will be seen that the latter form consists of a straight cylinder, provided with a flange at the top, and terminating at the bottom in a slanting or rounded portion, A^2. This form of slide or chute may also be used in connection with a slanting termination of mason-work, if desirable.

C designates a cover, consisting of a flat

plate, which may be roughened on the outside in any desirable manner, and is designed to rest upon an inwardly-extending flange, *d*, located near the top of the slide or chute. Preferably this flange *d* is furnished with a notch, *e*, and the cover C is provided with two prongs or hooks, *f;* for when thus made one of the prongs or hooks may be inserted under the flange opposite the notch *e*, and the other prong or hook may be dropped through the notch, and the cover may be then turned laterally so as to bring both said prongs or hooks under the said flange, and to secure it firmly in place and effectually obviate its tilting. The cover may be secured in place, however, by a chain, if desirable, or in any other suitable manner.

I may, with advantage, employ at the inner end of my slide or chute a gate, such as the one, D, illustrated in Fig. 1, adapted to slide up and down in guides transversely to the slide or chute. Then the slide or chute would serve the additional purpose of a measure, whereby the owner of the cellar could ascertain whether the amount of coal bargained for was actually supplied. It would also serve the additional purpose of effectually precluding the entrance of burglars through the slide or chute. Moreover, with such a gate the passage of coal from the slide or chute could be so regulated that a barrel or wheelbarrow may be filled from it, and the passage of coal stopped till the barrel or barrow was emptied and returned, thereby avoiding unnecessary shoveling in conveying coal from one part of the cellar to another.

It will be seen that by my invention I provide a very cheap, simple, and desirable coal-slide, which may be used in lieu of the masonwork slides or chutes ordinarily used heretofore, and may be embedded directly into the earth without any preparation.

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

1. A coal slide or chute composed of a vertical branch and a slanting portion or section, for communicating with a cellar.

2. A coal slide or chute made of cast-iron, and composed of a vertical branch provided with a flange and a slanting portion or section for communicating with a cellar.

3. The combination, with a coal slide or chute of cast-iron, composed of a vertical branch and a slanting portion or section, for communicating with a cellar, of an extensible or compensating section, substantially as and for the purpose specified.

4. The combination, with a coal slide or chute made of cast-iron, composed of a vertical branch and a slanting portion or section, for establishing communication between a cellar and a sidewalk or other adjacent ground, of a gate at or near the inner end, substantially as and for the purpose specified.

5. The combination of the coal slide or chute A A′, the extensible or compensating section B, provided with the flange *a*, bolts *b*, slots *c*, cover C, and gate D, substantially as specified.

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