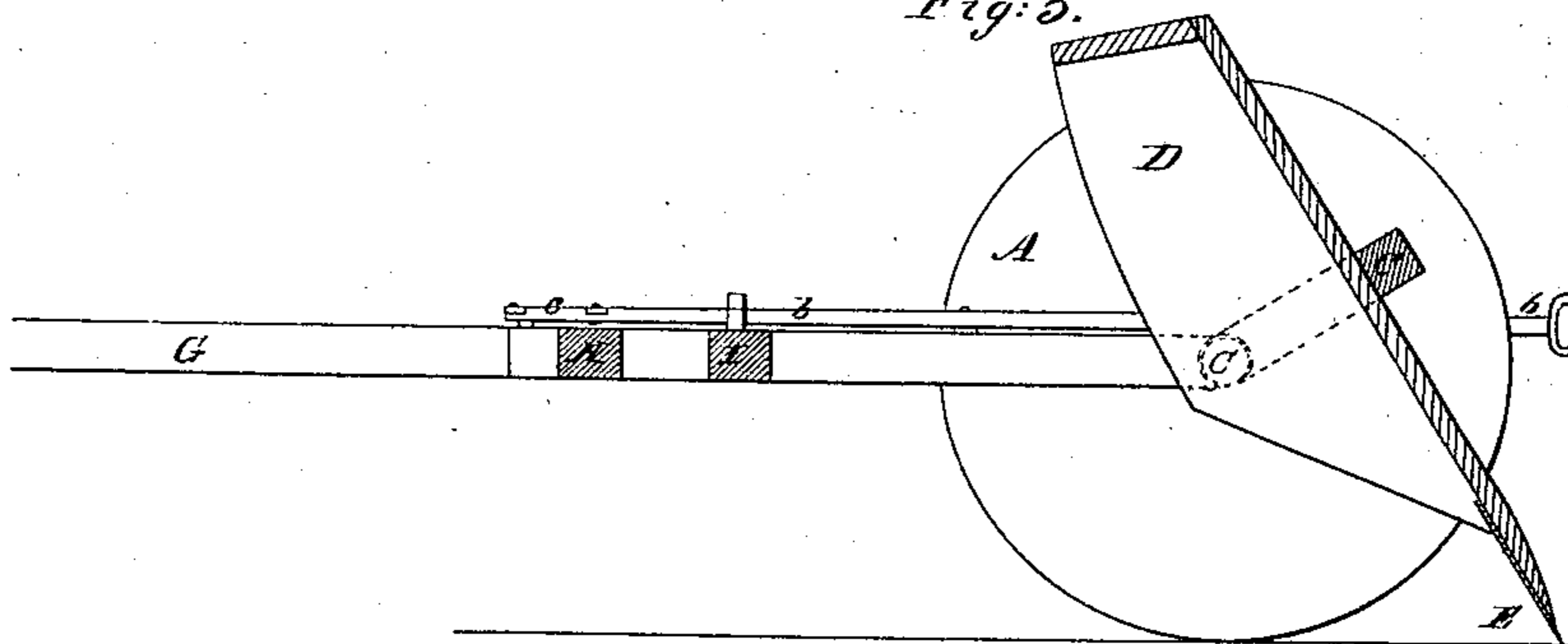
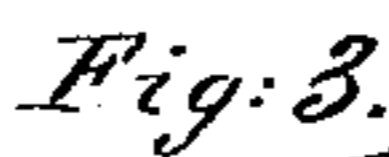
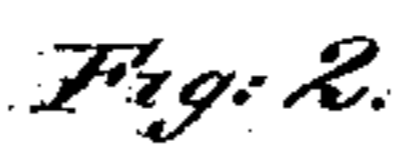


Dumping Scraper.

Patented May 6, 1856.
Fig. 1.

Fig: 1.



UNITED STATES PATENT OFFICE.

MATHEW S. KAHLE, OF LEXINGTON, VIRGINIA.

IMPROVEMENT IN DUMPING-SCRAPERS.

Specification forming part of Letters Patent No. 14,817, dated May 6, 1856.

To all whom it may concern:

Be it known that I, MATHEW S. KAHLE, of Lexington, in the county of Rockbridge and State of Virginia, have invented certain new and useful Improvements in Dumping-Scrapers; and I do hereby declare the following to be a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, in which—

Figure 1 represents a top plan of the scraper. Fig. 2 represents a longitudinal section through the machine as it stands when loaded, and representing in red lines its position when about to receive its load. Fig. 3 represents a vertical section through machine in its position after it is dumped.

Similar letters where they occur in the several figures denote like parts.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

A B represent a pair of carrying-wheels, united by a bent axle C, to which the scraper D is firmly affixed, so that said axle shall constitute the turning shaft of the scraper. The scraper D is shod with a circular piece of iron or steel E, and its body should be large enough to contain about an ordinary cart-load of earth.

F F are the handles of the scraper, which should be removable, so that the body of the scraper may turn around to dump and continue to turn to right itself again without inconvenience.

The scraper is so hung on the axle that it may turn clear around in a full circle or vibrate half around and then back again, as will be hereinafter described in the operation.

G G are the shafts, united at their rear to the axle C and braced in front of the scraper by the cross-bars H I. On the bar H is pivoted a lever *a*, to one end of which is connected a rod *b*, running back so as to be conveniently reached by the operator. To its other end is attached a forked arm *c*, to each fork of which is pivoted a connecting-bar *d*, which bars *d* are in turn united to the front

ends of two rods *e e*, pivoted, respectively, to the shafts G G at F F. The rear ends of the rods *e e* are bent around to form hooks, and when drawn together by pulling back the rod *b* these bent ends or hooks enter holes or recesses in the blocks *g g* on each side of the body of the scraper, and thus hold it firmly to prevent its swinging on the axle.

The red lines in Fig. 1 show the position of the above several devices when the catches are thrown out, to either allow the scraper to receive or discharge its load of earth.

The operation of the machine is as follows: The handles being introduced into their staples and the rod *b* pushed forward to throw out the catches, the scraper is raised up behind, as seen in red lines in Fig. 2, until it fills with earth. It is then brought down, the rod *b* pulled back to throw in the catches, and the body is locked in the position shown in black lines, Fig. 2. The handles may now be taken out and used for the next machine in its turn, and the machine drawn away to where the earth is to be deposited. When arrived at the proper place, without stopping the machine the rod *b* is pushed forward to release the catches, the front of the scraper drops and catches against the ground, while the machine, still moving on, pulls over the body D, the axle C turning in its wheels to admit of this. The machine continuing to move on, the rear of the body is thrown down, and, catching against the ground, turns it around again in proper position, and so on.

Having thus fully described the nature of my invention, what I claim therein as new, and desire to secure by Letters Patent, is—

So attaching the body of the scraper permanently to a bent axle supported in a pair of wheels as that said body may be dumped and returned back to its original position and ready for the next load without stopping the horses or changing their direction, substantially as herein set forth.

MATH. S. KAHLE.

Witnesses:

A. B. STOUGHTON,

THOS. H. UPPERMAN.