

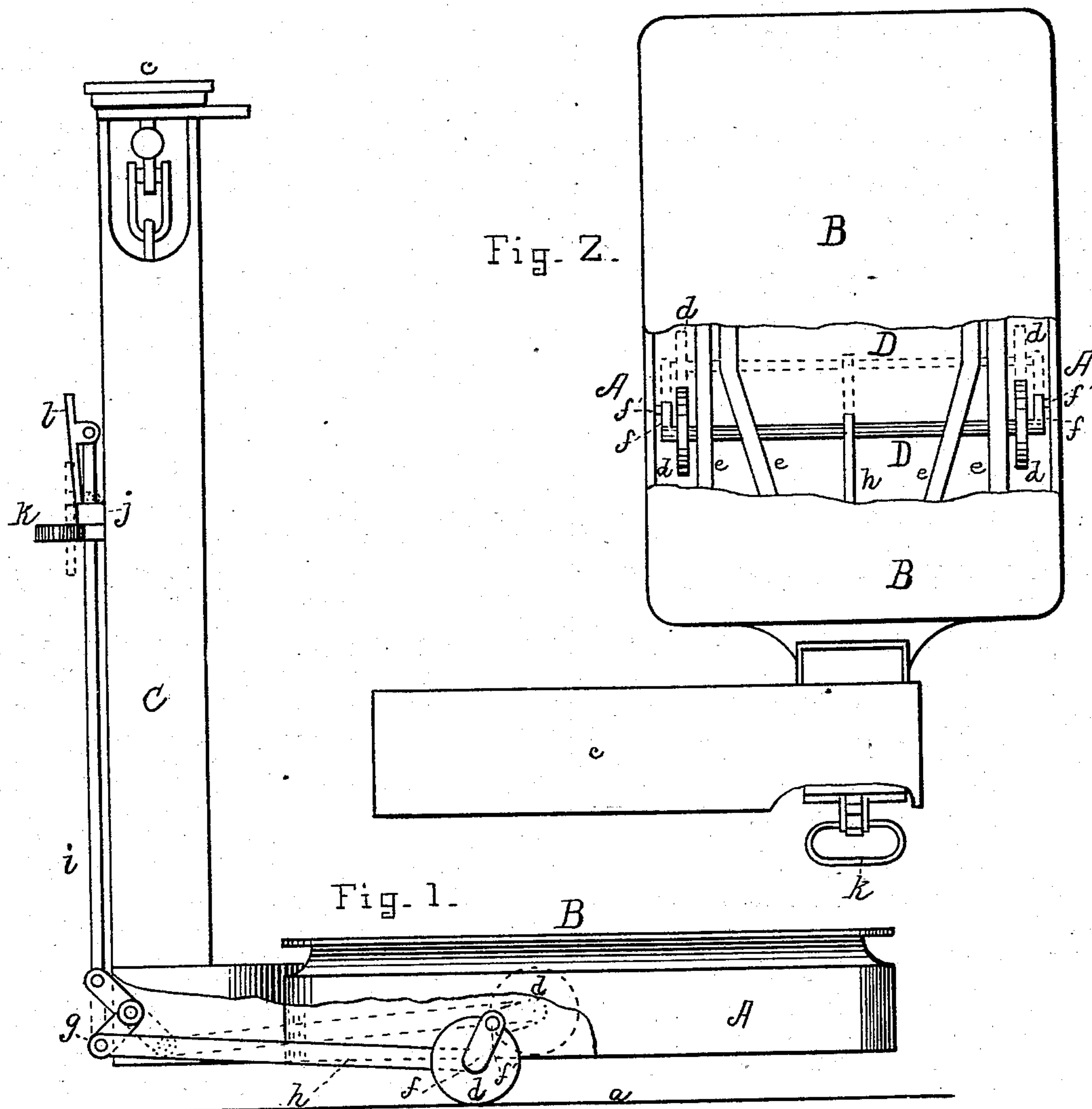
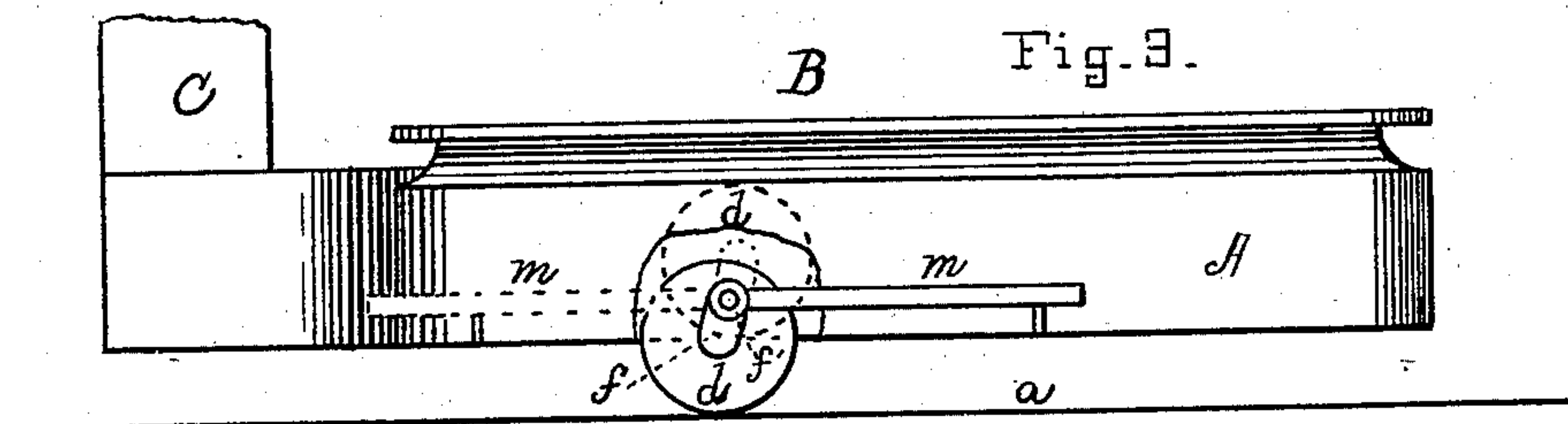
(No Model.)

H. F. KRUEGER.

ROLLER OR WHEEL FOR PLATFORM SCALES, &c.

No. 316,981.

Patented May 5, 1885.



Witnesses:

Norman Willard

William Krueger

Inventor:

Henry F. Krueger.

By his Atty. G. H. Albel.

UNITED STATES PATENT OFFICE.

HENRY F. KRUEGER, OF NEENAH, WISCONSIN.

ROLLER OR WHEEL FOR PLATFORM-SCALES, &c.

SPECIFICATION forming part of Letters Patent No. 316,981, dated May 5, 1885.

Application filed August 4, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. KRUEGER, a citizen of the United States, residing at Neenah, in the county of Winnebago and State of Wisconsin, have invented a new and useful Improvement in the Application of Rollers or Wheels to Various Articles for their Transportation, of which the following is a specification.

My invention relates to the application of said wheels to platform-scales, mechanics' benches, portable machinery of various kinds, household utensils, and a variety of articles whose movements from place to place is desirable, but which are of too great weight for its easy accomplishment without the use of such rollers or wheels; and it consists of a roller or wheels so attached to the desired article that they can be depressed below its bottom, by which means the article is raised from the floor, its weight being supported upon them, and transported by their revolution from place to place and returned to its natural position upon the floor, where it will rest firmly during use. I attain these objects by the mechanism shown in the accompanying drawings, in which—

Figure 1 is an elevation of a platform-scale having the invention applied. Fig. 2 is a plan of the same. Fig. 3 is a modified form of its application to the same article.

Similar letters of reference indicate like parts in the several views.

A represents the base of the scale; *a*, the floor or surface upon which it rests; B, the weighing-platform; C, the standard; *c*, the cap or arm of the standard.

d d are two truck-wheels revoluble upon the axle D.

e e e e are the weighing-levers of the scale. *f f* are elbows formed upon the extremities of the axle D, and by which it is connected by the pins or bolts *f' f'* to the base A of the scale eccentrically with the axial line of the wheels *d d* and the axle D.

g is an elbow-lever pivoted to the base A near the foot of the standard C.

h is a rod connecting one arm of the elbow-lever with the axle D.

i is a rod connected with the other arm of said lever, and extending upward along the standard C and within the guide or keeper *j*,

and having near its extremity the handle *k* and latch *l*—the former secured to it rigidly, the latter loosely by a pin through it and the upper extremity of said rod.

Referring to Figs. 1 and 2, the manner of using the roller or wheels is as follows: Wishing to move the scales to another location, the operator grasps the handle *k*, lifting it, and by means of it raises the base of the scales from the floor, the latch *l* falling into the position shown and retaining it thus, and at the same time, through the action of the elbow-lever *g* and connecting-rod *i*, bringing the roller or wheels from their normal position, as shown in the drawings in dotted lines, to the position as illustrated in heavy lines, elevating the scales and supporting them thus during the change in their location. A slight push by the operator upon the standard C moves the scales from place to place, as desired, when, again lifting upon the handle *k* and simultaneously pressing with the hand upon the upper extremity of the latch *l*, it is disengaged from its catch, the scales are lowered, resuming their normal position, and resting firmly upon the floor during the operation of weighing.

The truck-wheels *d d* may be applied to the desired article in a variety of methods by which its weight is transferred from the floor upon which it is resting to said wheels. A method differing from the above is shown in Fig. 3. The wheels are connected with the axle in a manner similar to the one as above explained. The bolt or pin *f'* is rigidly secured to the arm *f*, and extended upon one side of the base A, through it, and terminating in the handle *m*. The wheels and handle in their normal position are shown in dotted lines. By transferring the lever to the position indicated by heavy lines the wheels are carried below the base A, as explained in the description of Figs. 1 and 2, elevating the base and adapting it for transportation, as before described.

The truck-wheels may be applied as described, both being upon one axle, as in Fig. 2, or each upon separate ones, and operated singly or together in the process of lowering them and raising them, and they may be, as shown, two separate wheels having a narrow face, or

of a single wheel or roller, its face wide and formed a little crowning, like the face of a belt-pulley, for the purpose of easily changing the direction in which the article to which they are attached is being moved.

I do not confine my invention to its application only in the manner shown, as it may be applied to different articles in a variety of methods. The roller or wheels can be depressed and the article to which they are applied raised upon them by means of a screw, lever, inclined plane, or otherwise, the point at which they are applied being such that the article will be nearly balanced when it is elevated upon and its weight transferred to them.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a device as hereinbefore described, the truck-wheels *d d*, the bent swinging axle *D*, connected eccentrically with its axial line to the base of the article to be moved, the point of connection therewith being such that

the lower circumference of said wheels may be adjusted in a vertical plane above or below the lowest point in the base of said article by means of the partial revolution of said axle, a suitable rod or handle, by which it is revolved, and a catch or stop for its retention at the lowest limit of said movement, substantially as shown and set forth.

2. In a device as hereinbefore described, the bent swinging axle *D*, having the truck-wheels *d d*, the connecting-rods *h i*, elbow-lever *g*, guide *j*, and latch *l*, all combined, constructed, and arranged to operate as described.

3. In a device as hereinbefore described, the truck-wheels *d d*, bent swinging axle *D*, connecting-rods *h i*, elbow-lever *g*, guide *j*, latch *l*, and handle *k*, all constructed, combined, and operating as shown and described.

HENRY F. KRUEGER.

Witnesses:

NORMAN WILLORD,
WILLIAM KRUEGER.