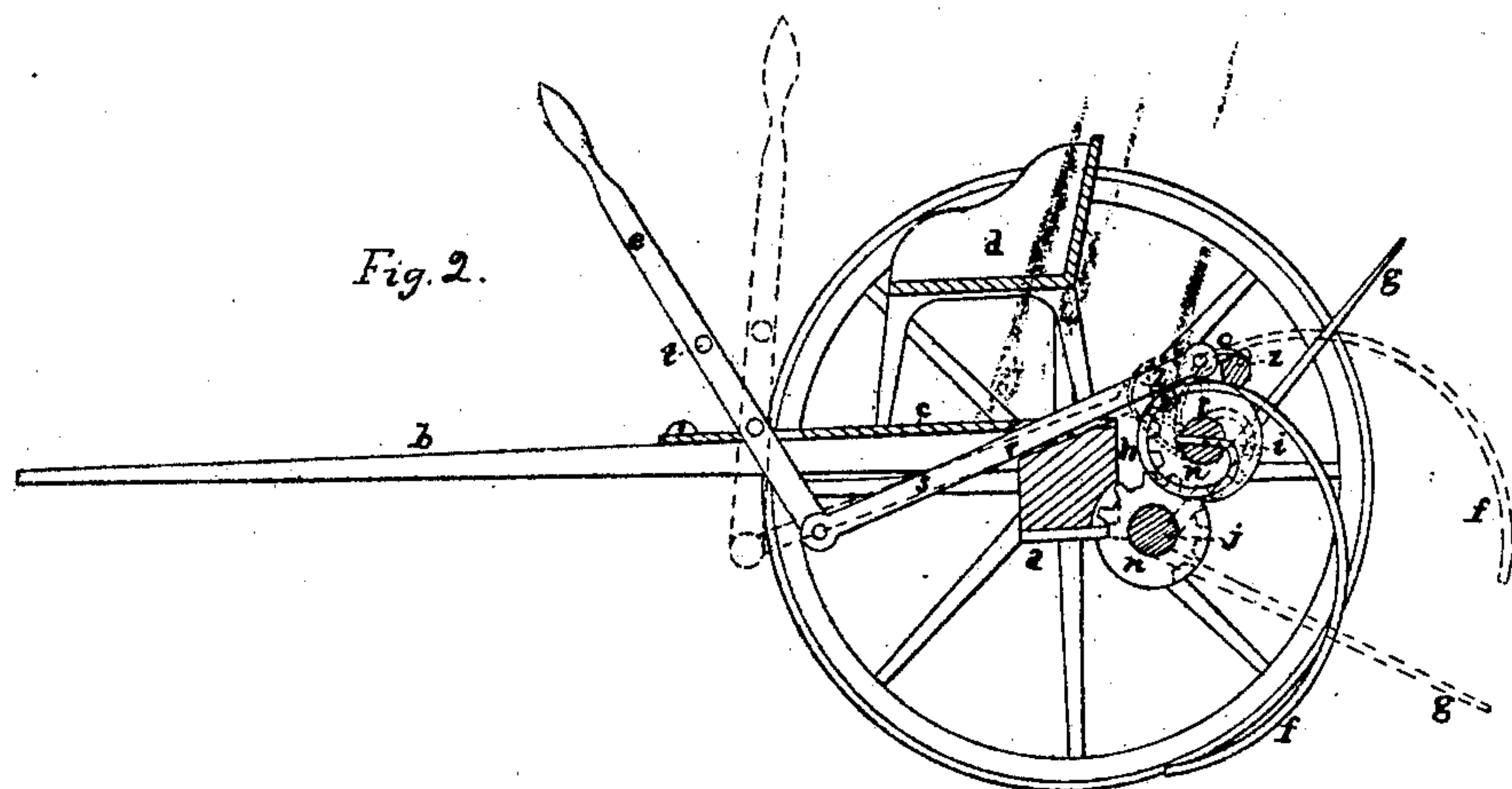
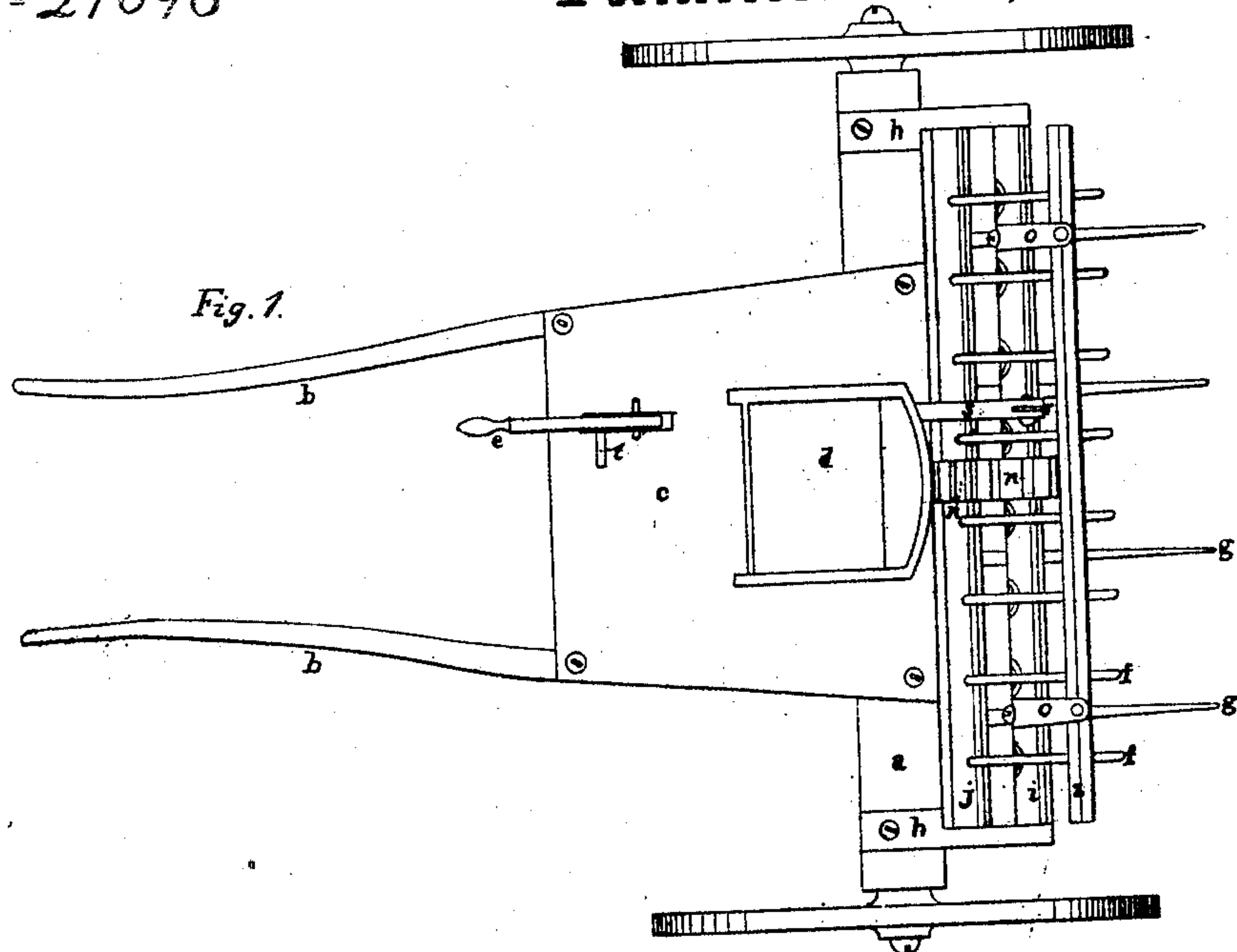


M. Raezer.

Horse Rake.

Nº 21698

Patented Oct. 5, 1858.



Inventor.

M. Raezer.

UNITED STATES PATENT OFFICE.

MATHIAS RAEZER, OF READING, PENNSYLVANIA.

IMPROVEMENT IN HAY-RAKES.

Specification forming part of Letters Patent No. **21,698**, dated October 5, 1858.

To all whom it may concern:

Be it known that I, M. RAEZER, of the city of Reading, county of Berks, and State of Pennsylvania, have invented certain Improvements in a Horse Hay-Rake and Grain-Rake; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, the letters having reference to both views, in which—

Figure 1 is a plan view, and Fig. 2 is a longitudinal section thereof, in which—

a is the axle of the carriage. *b b* are thills secured to axle *a*, upon which is a platform, *c*. *d* is a seat. *e* is a lever, by which the teeth *f* and prongs *g* are operated. *h h* are bearings secured to axle *a*, and support shafts *i* and *j*. *z* is an extra spring-bar, secured to shaft *i* by means of flat springs *o o*, and bears upon the teeth *f*. *n n* are gear-wheels on shafts *i* and *j*, which give motion to shaft *j*. Shaft *i* receives motion by means of arm *r*, connecting-rod *s*, and lever *e*. *g g* are prongs, which work between the spring-

teeth *f* and are secured to shaft *j*. The spring-teeth *f* pass entirely around shaft *i* in a serpentine form and pass through and are riveted or screwed thereto.

The operation of this machine is as follows: The spring-teeth *f* proceed to gather the crop. The rake being full, the operator upon the seat *d* takes his foot off of foot-pin *t* and draws lever *e* toward him, which causes the spring-teeth *f* to raise and the prongs *g* to drop down and discharge the contents of the teeth, as represented in dotted lines, Fig. 2. The lever *e* is then pressed forward by means of the foot-pin *t*, and the operation repeated.

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

The spring-bar *z*, the foot-lever *e*, and the gearing *n n*, arranged and combined as herein described, for the purpose set forth.

MATHIAS RAEZER.

Witnesses:

G. S. KINSEY,

WM. B. SCHOENER.