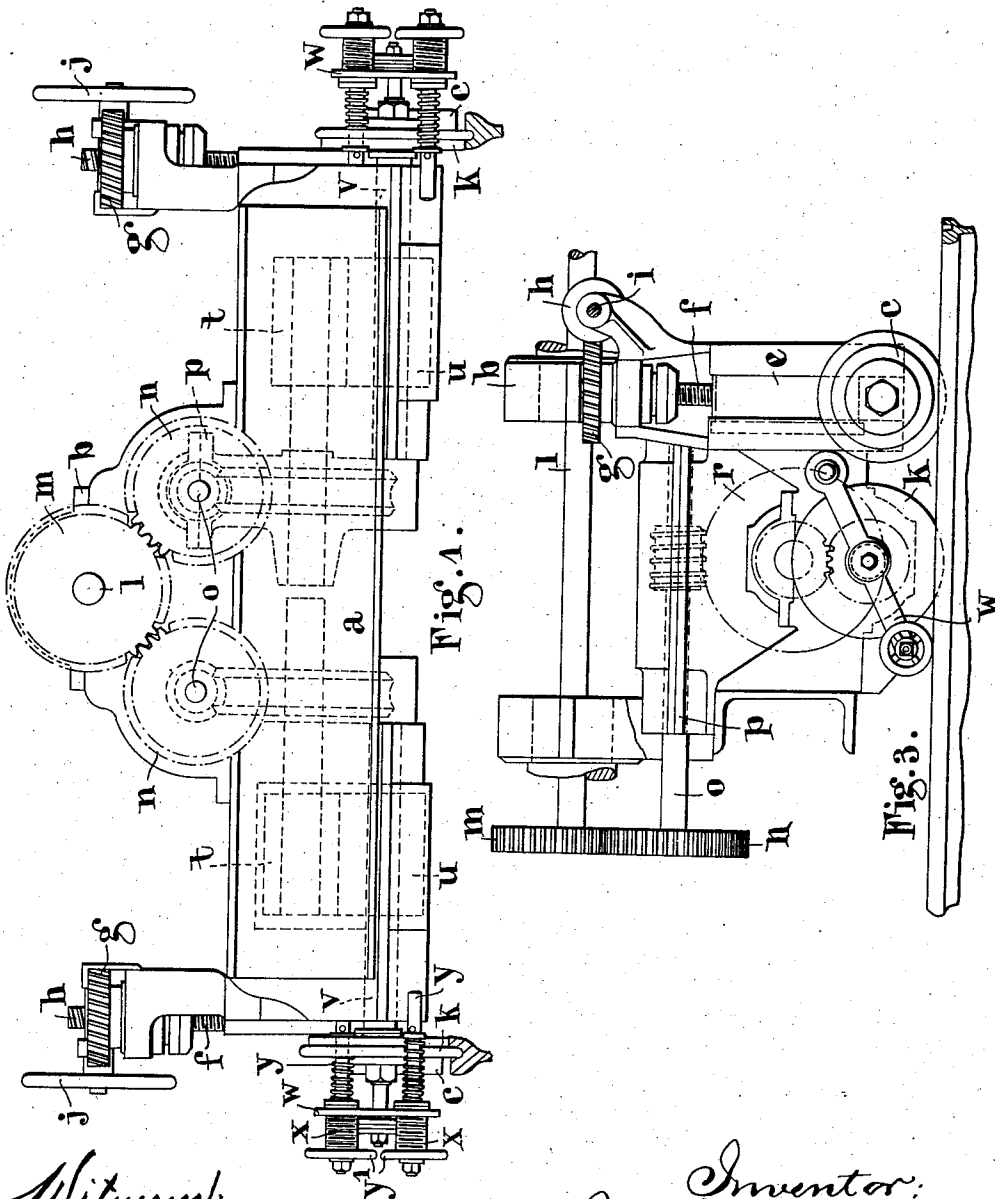


M. WOODS & T. J. GILBERT.
MACHINE FOR DRESSING RAILS.
APPLICATION FILED FEB. 4, 1911.

1,027,367.

Patented May 21, 1912.

2 SHEETS—SHEET 1.



Witnesses:
James Bransford
L. E. Witham.

Inventor:
Michael Woods,
Thomas J. Gilbert.
By:
Alexander & Sowell
Attorneys.

M. WOODS & T. J. GILBERT.
MACHINE FOR DRESSING RAILS.
APPLICATION FILED FEB. 4, 1911.

1,027,367.

Patented May 21, 1912.

2 SHEETS-SHEET 2.

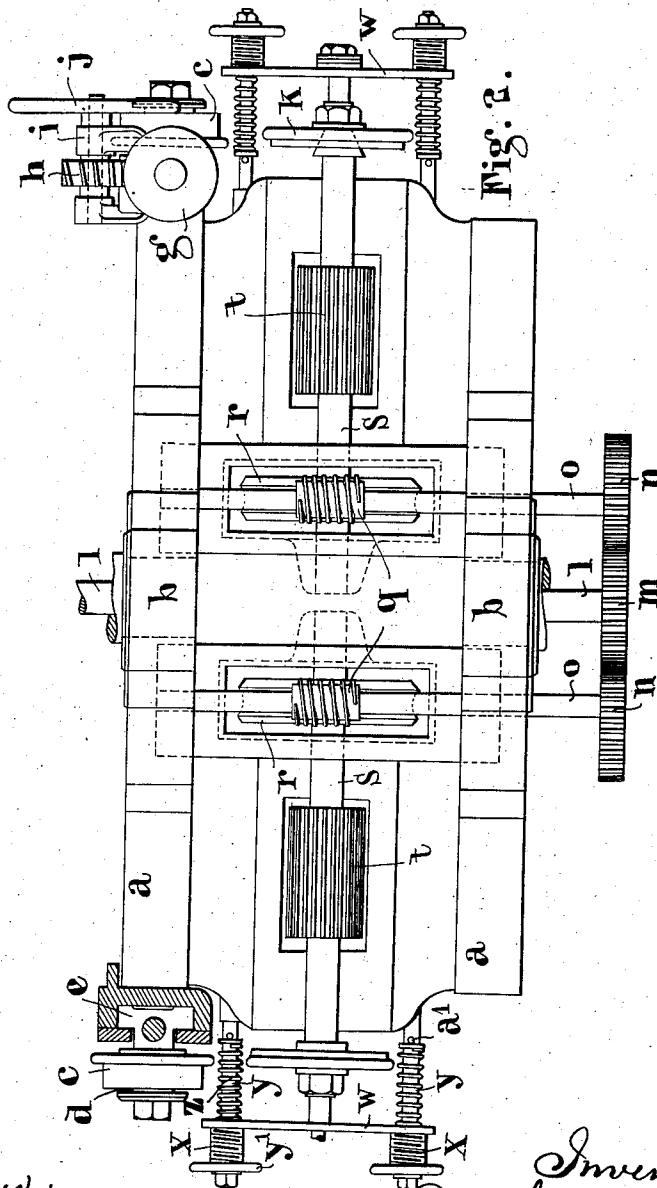


Fig. 2.

Witnesses:
James P. Mansfield
L. E. Witham.

Inventor:
Michael Woods
Thomas J. Gilbert
By:
Alexander T. Lowell
Attorney

UNITED STATES PATENT OFFICE.

MICHAEL WOODS, OF CARLTON, AND THOMAS JEFFERSON GILBERT, OF BRUNSWICK,
VICTORIA, AUSTRALIA.

MACHINE FOR DRESSING RAILS.

1,027,367.

Specification of Letters Patent.

Patented May 21, 1912.

Original application filed January 17, 1910, Serial No. 538,519. Divided and this application filed February 4, 1911. Serial No. 606,500.

To all whom it may concern:

Be it known that we, MICHAEL WOODS, a subject of the King of Great Britain and Ireland, and residing at 309 Pigdon street, Princes Hill, Carlton, in the county of Bourke, State of Victoria, Commonwealth of Australia, and THOMAS JEFFERSON GILBERT, a subject of the King of Great Britain and Ireland, and residing at 1 Minnie street, Brunswick, in the county of Bourke, State of Victoria, Commonwealth of Australia, have invented certain new and useful Improvements in and Relating to Machines for Dressing Rails, of which the following is a specification.

This invention relates to machines for dressing rails of the kind in which the dressing means are carried by an attachment which is pivotally secured to the machine, as described, for example, in the specification to our co-pending application Serial No. 538519 filed 17th January 1910.

The object of the present invention is to provide an efficient and readily attachable combined carriage and holder for a tool or tools adapted for use in deepening the grooves and reducing the lips or guards of tram rails or the like.

The invention consists in a combined carriage and tool holder for use with rail dressing machines adapted to support horizontal cutting means and to be itself removably pivoted to the machine about a central longitudinal axis thereof.

One mode of carrying out the invention is illustrated by the accompanying drawings in which—

Figure 1 is an elevation of a combined carriage and tool holder constructed in accordance with the present invention, while, Fig. 2 is a plan view of the same Fig. 3 is an end elevation of Fig. 2.

In all the figures parts have been omitted, sectioned or broken away for the sake of clearness.

In carrying out the invention according to one mode the combined carriage and holder consisting of a framework *a* is provided with removable trunnion caps *b* for accommodating hollow trunnions on the rail dressing machine, thus permitting of the carriage being removed when necessary. The frame work *a* is supported upon flanged

wheels *c* each of which is mounted upon pins *d* secured to or formed integral with a slide *e* attached to a screw *f* engaging with a worm wheel nut *g* which can be rotated by means of a worm *h* upon a shaft *i* operated by a hand wheel *j* or by power, so that, on turning the said hand wheel *j* the flanged wheel is raised or lowered. The flanges of the wheel may rest upon the grooved bottoms of the rails or they may run upon the rail tread, according to circumstances.

Mounted on front of or behind the flanged wheels *c* are horizontal cutting tools *k* each of which is driven by a suitable motor carried by the machine, the arrangement of the gearing being as follows:—The shaft *l* which passes through the hollow trunnions of the machine, is coupled at one end to a motor driven shaft and carries at its other end a toothed wheel *m* engaging with two toothed wheels *n* each of which is mounted upon a shaft *o* journaled in bearings *p* and carrying a worm *q* which engages with a worm wheel *r* carried by a shaft *s* supported in suitable bearings. Upon the shaft *s* is a toothed drum *t* engaging with a toothed drum *u* through which passes a shaft *v* upon which is mounted a horizontal cutting tool *k*. The shafts *s* are fitted at their outer ends with a cross piece *w* threaded upon externally threaded sleeves *x* which are loosely mounted on studs *y* and provided with hand wheels *y*¹. Surrounding each stud is a spring *z* bearing at one end against the sleeves *x* and at the other end against a stop *a*¹. On turning the hand wheels *y*¹ the cross piece *w* is moved laterally and carries with it the shaft *v* which is adapted to slide through the drum *u* and thus adjusting the cutter in a horizontal direction.

Where one rail of a track is higher than the other, the combined carriage and holder will turn slightly upon the trunnions thus preventing the irregularities in one rail influencing the treatment of the other. Any vertical adjustment of the cutters which may be required can be effected by raising or lowering the carriage on the wheels *c* in the manner hereinbefore described. Each cutter may be of any suitable design which will enable the groove to be deepened and the rail lip dressed in one operation, or they may be treated separately.

Having now described our invention what we claim as new and desire to secure by Letters Patent is:—

1. In rail dressing machines, a combined carriage and holder, horizontal cutting means carried thereby, means for removably and freely pivoting said combined carriage and holder to the machine about a central longitudinal axis thereof and additional means independent of the dressing means and of the machine for supporting said combined carriage and holder upon the rails being treated.
2. In rail dressing machines, a combined carriage and holder, horizontal cutting means carried thereby, means for removably and freely pivoting said combined carriage and holder to the machine about a central longitudinal axis thereof, additional means independent of the dressing means and of the machine for supporting the said combined carriage and holder upon the rails being treated, means for laterally adjusting said cutting means, and means for vertically adjusting said cutting means.
3. In rail dressing machines, a combined carriage and holder, horizontal cutting tools carried thereby, means for removably and freely pivoting said combined carriage and holder to the machine about a central longitudinal axis thereof, a shaft supporting each cutting tool, studs adjacent to said shaft, screwed sleeves loosely fitting upon said studs, a cross piece threaded upon said sleeves and supporting the outer end of said shaft, hand wheels operating said sleeves, a spring around each said stud and abutting at one end against said sleeves, and a stop upon each stud at the other end of each said spring.

4. In rail dressing machines, a combined carriage and holder, horizontal cutting tools carried thereby, means for removably and freely pivoting said combined carriage and holder to the machine about a central longitudinal axis thereof, flanged wheels supporting said combined carriage and holder upon the rails, a pin supporting each flanged wheel, a slide carrying said pin, a screw connected to said slide, a worm wheel nut upon said screw, a worm engaging said worm wheel nut and a rotatable shaft carrying said worm.

5. In rail dressing machines, a combined carriage and holder, horizontal cutting tools carried thereby, means for removably and freely pivoting said combined carriage and holder to the machine about a central longitudinal axis thereof a shaft carrying each cutting tool, a toothed drum mounted upon said shaft, a second toothed drum engaging therewith, a shaft carrying the said second toothed drum, a worm wheel upon said shaft, a worm engaging said worm wheel, a shaft carrying said worm, a toothed wheel upon said shaft, and a toothed wheel upon the main shaft engaging therewith.

In testimony whereof we affix our signatures in the presence of two subscribing witnesses.

MICHAEL WOODS.

THOMAS JEFFERSON GILBERT.

Witnesses as to the signature of Michael Woods:

B. H. MATTHEWS,

P. A. OUTHWAITE.

Witnesses as to the signature of Thomas Jefferson Gilbert:

CECIL McCLASTREN,

GEORGE A. MCREN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."