





# UNITED STATES PATENT OFFICE.

OTTO WILLIAM MEISSNER, OF WESTMOUNT, QUEBEC, CANADA.

## SHAFT-ROTATING MEANS.

No. 859,503.

Specification of Letters Patent.

Patented July 9, 1907.

Application filed December 3, 1906. Serial No. 346,154.

*To all whom it may concern:*

Be it known that I, OTTO WILLIAM MEISSNER, of Westmount, Province of Quebec, Canada, have invented certain new and useful Improvements in Shaft-  
5 Rotating Means; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates particularly to devices for rotating shafts by hand and it has for its object to provide a device adapted to normally lie idly out of operative  
10 engagement with the shaft and out of the way of passing things or things passed thereby, such device being adapted when moved out of its normal position to engage the shaft.

For full comprehension, however, of my invention  
15 reference must be had to the accompanying drawings in which similar reference characters indicate the same parts and wherein

Figure 1 is a side elevation of my improved device; Fig. 2 is a plan view thereof; Figs. 3 and 4 are detail  
20 views of a spanner; and a ratchet wheel having a hub upon which the bracket is rotatably supported.

In this instance the shaft *b* to be rotated forms a part of the brake mechanism of a railway car, several of the members of which are indicated at *c*, and *d*, such shaft  
25 having a ratchet wheel *f* mounted rigidly thereon. A bracket *g* is bolted to the vertical member *d* and carries a pawl adapted to coact with the ratchet wheel, and the engaging end *h* of this pawl is heavier than its tail *i*, while a weight *j* is pivoted to this bracket and arranged  
30 to bear either upon the tail of the pawl and retain the end *h* thereof yieldingly in engagement with the ratchet wheel, or lie on the top of the ratchet wheel and allow the heavier end *h* to fall out of engagement with the latter. The bracket *g* also serves as a brace for the  
35 shaft *b*.

The hub *k* of the ratchet wheel *f* is elongated and formed with a flange *m* between which and the top of the ratchet wheel a two piece strap *n* is rotatably retained, the ends *n'* of the latter being curved upwardly,  
40 and a clamping bolt *o* secures these ends together, while the opposite ends *n''* are interlocked one being slotted as at *n'''* and the other hooked and passed therethrough to engage the end of the slotted piece, as shown in Fig. 2.

A spanner *q*, with a square socket *q'*, has trunnions *r* preferably cast thereon and mounted pivotally in the ends *n'* of the strap (the latter constituting a rotatable bracket) the portion *s* of the shaft above the ratchet wheel being square, and the spanner is adapted when  
50 raised to its horizontal position to have its square socket engage this square portion of the shaft, and when it is dropped it falls into parallelism with and adjacent to

the shaft and consequently out of the way of passing things or things it passes. When it is desired to rotate the shaft the spanner is raised to the horizontal position  
55 shown in Fig. 1 thereby causing it to engage the shaft, and the long spanner handle affords considerable more leverage than the usual hand wheel thus enabling greater torque to be applied to the shaft.

Although I have illustrated my improved device in  
60 connection with a brake shaft it can be applied with advantage to any shaft to be rotated, without departing from the spirit of my invention.

What I claim is as follows:—

1. The combination with a shaft to be rotated having a  
65 polygonal portion, a ratchet wheel mounted rigidly upon the shaft, a gravity pawl mounted independently of the shaft and adapted to engage the said ratchet wheel, and a bracket rotatably mounted upon the shaft, of a spanner pivoted to the said bracket and normally hanging out of  
70 operative engagement with the shaft, such spanner having a polygonal socket adapted when the spanner is raised to rotatively engage the polygonal portion of the shaft.

2. The combination with a shaft to be rotated having a  
75 polygonal portion, a ratchet wheel mounted rigidly upon the shaft, a gravity pawl mounted independently of the shaft and adapted to engage the said ratchet wheel there being a hub upon the ratchet wheel and a bracket rotatably mounted upon the said hub, of a spanner pivoted to the said bracket and normally hanging out of operative  
80 engagement with the shaft, such spanner having a polygonal socket adapted when the spanner is raised to rotatively engage the polygonal portion of the shaft.

3. The combination with a shaft to be rotated having a  
85 polygonal portion, a ratchet wheel mounted rigidly upon the shaft, a gravity pawl mounted independently of the shaft and adapted to engage the said ratchet wheel, a hub upon the ratchet wheel and a strap clamped loosely around the hub and having its ends bent upwardly, of a spanner pivoted to the said ends of the strap and normally hang-  
90 ing out of operative engagement with the shaft, such spanner having a polygonal socket adapted when the spanner is raised to rotatively engage the polygonal portion of the shaft.

4. The combination with a shaft to be rotated having a  
95 polygonal portion, a ratchet wheel mounted rigidly upon the shaft, a gravity pawl mounted independently of the shaft and adapted to engage the said ratchet wheel, a hub upon the ratchet wheel and a two piece strap clamped loosely around the hub and having a pair of ends bent up-  
100 wardly and its opposite ends being one slotted and the other in the form of a hook adapted to be inserted through the said slot, of a spanner pivoted to the said ends of the strap and normally hanging out of operative engagement with the shaft, such spanner having a polygonal socket  
105 adapted when the spanner is raised to rotatively engage the polygonal portion of the shaft.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

OTTO WILLIAM MEISSNER.

Witnesses:

WILLIAM P. McFEAT,  
FRED. J. SEARS.