

UNITED STATES PATENT OFFICE.

HARMON G. WEIBLING, OF DENVER CITY, COLORADO TERRITORY.

IMPROVEMENT IN CARRIAGE-WHEELS.

Specification forming part of Letters Patent No. 37,480, dated January 20, 1863.

To all whom it may concern:

Be it known that I, HARMON G. WEIBLING, of Denver City, Colorado, have invented an Improvement in Carriage-Wheels, of which the following is a specification.

The description and general principles of the invention consist in having the friction-rollers *E E* placed in a groove cut in the lower side of the spindle *c*, and resting on the pipe or box *b*; also the friction-rollers *E E* in the shoulder *H* and in the burr or nut *m*, the rollers in each case to rest on "Babbitt metal," which will do away with much of the friction of the ordinary thimble-skein, these rollers to be so arranged as to act independently of each other, thereby making each perform its own rotary motion in its own particular position. The spindle *c* is fastened to the axle *K* with the gutta-percha packing *A*, the gutta-percha to be dissolved to the consistency of thick tar and then spread on the surface of the axle *K*, and the inner surface of the spindle *c*, which is then forced upon the axle to its proper place and secured by means of the iron strap or bar *D*, inserted in a groove in the lower side of the axle, and extending from one

end to the other of the axle. The spindle *c* is fastened to the axle *K* by means of the strap of iron *D*, running back on the under side of the axle *K* to the bolt *J*, or through the entire length of the axle, the spindle *c* being drawn to its place and secured by means of the nut *N*, the bar *D* to be secured to the axle by means of bolts running through the axle and bar, or by clasps passing over the two and secured by nuts and screws.

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

My peculiar method of constructing the axle boxes or thimbles and attaching them to the axles, by means of the gutta-percha packing *A* and screws, where the boxes or thimbles are made to taper, as described, having a canal lined with Babbitt metal, in which rollers *E* are placed, the whole used in construction with the strap *D* on the under side of the axle, and the bolt *J*, the friction-rollers, spiral groove, and lubricator, all as described and set forth.

HARMON G. WEIBLING.

Witnesses:

ALMON DIBBLE,
HENRY S. LATHROP