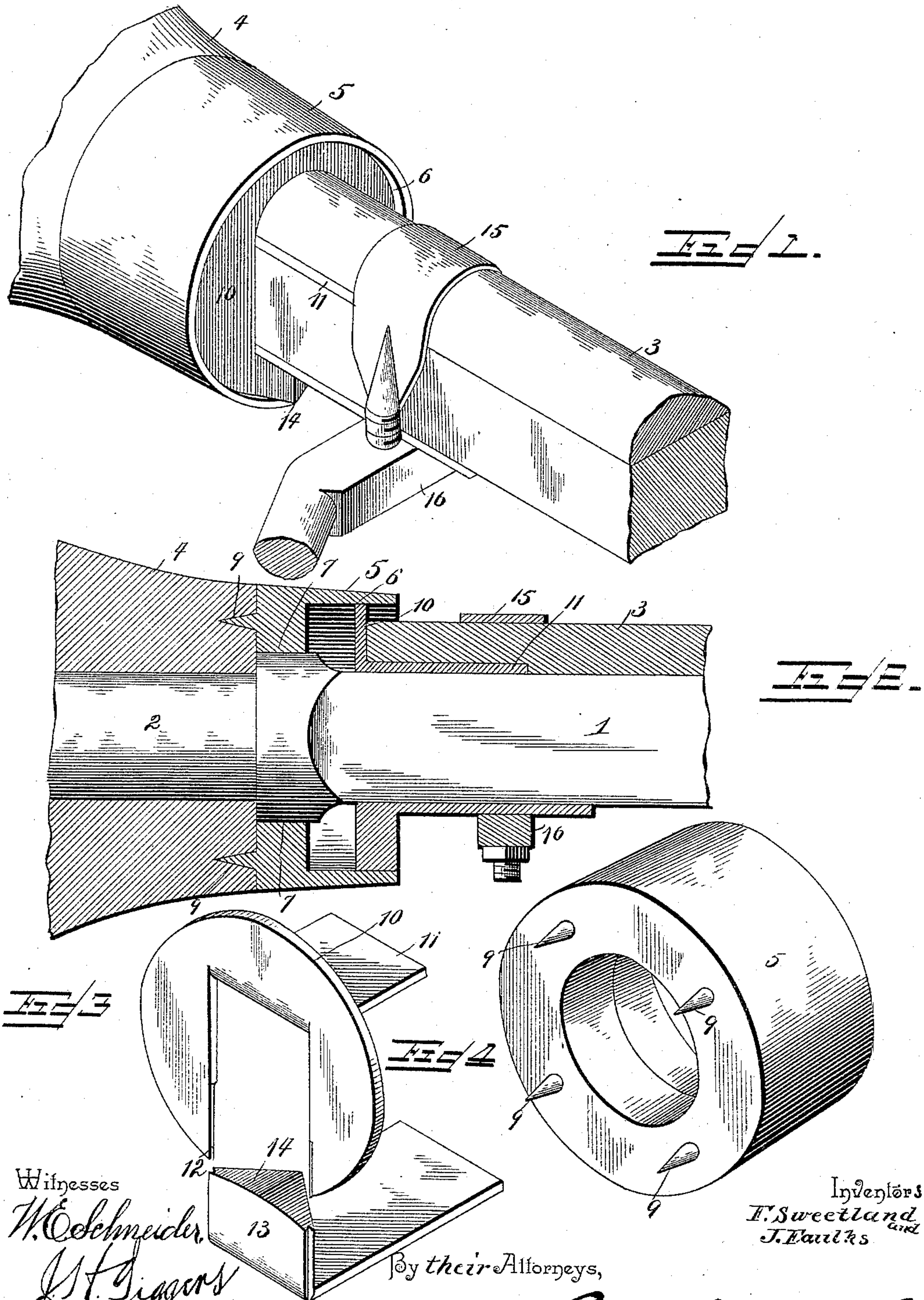


(No Model.)

F. SWEETLAND & J. FAULKS.
SAND BAND FOR VEHICLES.

No. 489,838.

Patented Jan. 10, 1893.



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UNITED STATES PATENT OFFICE.

FRANK SWEETLAND, OF ANGOLA, AND JOHN FAULKS, OF BUFFALO,
NEW YORK.

SAND-BAND FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 489,838, dated January 10, 1893.

Application filed October 4, 1892. Serial No. 447,837. (No model.)

To all whom it may concern:

Be it known that we, FRANK SWEETLAND, residing at Angola, and JOHN FAULKS, residing at Buffalo, in the county of Erie, State of New York, citizens of the United States, have invented a new and useful Sand-Band Attachment for Vehicles, of which the following is a specification.

Our invention relates to improvements in sand-band attachments for hubs of vehicle wheels, and the objects in view are to provide an efficient device adapted to be applied to the hubs and axles of vehicles, and designed to prevent the entrance of sand or mud into the bearing or spindle portion of the hub.

With these general objects in view, the invention consists in certain features of construction hereinafter specified and particularly pointed out in the claims.

Referring to the drawings—Figure 1 is a perspective view of the inner end of a hub and a portion of the axle, the latter being broken away and provided with a sand-band attachment constructed in accordance with our invention. Fig. 2 is a longitudinal vertical sectional view. Fig. 3 is a detail in perspective of the scraping collar, the parts being separated. Fig. 4 is a detail in perspective of the hub collar.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing our invention, we may employ the device in connection with an axle made wholly of metal or one formed of wood and metal, though we do not limit ourselves in this respect, notwithstanding the fact that we have illustrated the same in connection with an axle of wood and metal.

1 designates the axle which, as usual, terminates at its extremity in the reduced spindle or bearing 2, and is surmounted between its bearings with the usual axle-bed 3.

4 designates the hub, which may be of any usual construction, and 5 designates the hub-collar, whose external diameter agrees with the hub, and which is provided with an internal bore or annular chamber 6 formed at its rear end, and terminating at its inner end in a reduced spindle-receiving bore 7. The hub-collar may be secured to the hub at the inner end of the same in many different ways, namely,

by bolts or screws, or as herein shown, by means of spurs or teeth 9, formed at the outer end of the hub-collar and driven into the hub. Such details, however, are immaterial to a consideration of our invention.

The axle is embraced on its upper and opposite sides by a circular collar or disk 10, in the construction of which the same is slotted from the lower side to near the upper side, whereby the intermediate portion of the stock may be bent outward at a right angle to the blank to form a securing-plate 11. The recess thus formed by the removal of the stock or outward bending of the same, serves to receive and enable the collar to straddle the axle and said collar, as a whole, is of such diameter as to enable it to loosely fit within the annular chamber or recess 6 of the hub-collar. Those portions of the opposite edges of the recess that receive the axle and which are below the axle, are beveled as indicated at 12, and the same receive the opposite grooved edges of an L-shaped plate 13, whose vertical portion forms a combination of the collar 10, and whose horizontal portion extends inward parallel to the plate 11 and embraces the under side of the axle. The outer face of the vertical portion of this L-shaped plate is provided with an angular scraping-shoulder 14, which is of a width about agreeing with the depth of the annular chamber 6 of the hub-collar. After slipping the collar 10 upon the axle, the L-shaped plate is next placed in position, and the collar as a whole moved up so as to occupy the annular chamber 6 of the hub-collar. The wooden axle-bed is then placed in position, and an ordinary inverted U-shaped clip 15 introduced over the axle-bed, the axle and the two plates 13 and 11. An ordinary tie-plate may be employed for securing the clip in position, or as herein shown, one of the buggy irons or braces 16 may be employed for this purpose.

It will thus be seen that the hub-collar serves to extend the hub properly a slight distance inward over the shoulder of the spindle of the axle and that the scraping-collar fills the opening in the hub-collar, and by means of its oppositely beveled scraping shoulder serves to direct from the hub-collar any mud, dust, or sand that may find its way therein,

and such scraping is directed from the under or lower side of the hub-collar so that it does not again fall back upon the axle, and where by no possibility it could again get into the
5 hub-collar.

From the foregoing description in connection with the accompanying drawings it will be seen that we have provided a very simple, and at the same time, efficient device, that
10 may be applied to all vehicles, and efficiently serve to prevent the entrance of mud or sand, or other grit into the bearing of the hub and axle, whereby the latter is preserved and the wheel prevented from becoming clogged and
15 foul.

Having described our invention, what we claim is:

1. The combination with an axle and its hub, of a metallic hub-collar secured to the
20 inner end of the hub and provided at its rear face or side with an annular recess the bottom of which has a reduced opening loosely fitting upon the collar of the axle, of a scraping-collar consisting of a circular flange and
25 rearwardly-disposed securing-plates mounted on the axle, said flange fitting within the annular recess of the hub-collar, and a shoulder formed on the rear side of the flange of the scraping-collar and extending to the rear edge
30 of the recess in the hub-collar, and means for securing the scraping-collar in position on the axle, substantially as specified.

2. The combination with an axle and its

hub, of a hub-collar provided with spikes or teeth at its inner edge, and driven into the
35 rear end of the hub, said hub-collar being provided at its outer end with an annular bore, of a scraping collar mounted on the axle and fitting in the annular bore, said scraping collar being provided upon its outer side and its
40 lower end with a beveled shoulder extending to the outer edge of the bore, substantially as specified.

3. The combination with an axle and its hub, the latter terminating at its inner end
45 in an annular bore, of a scraping-collar, the under side of which is recessed to embrace the axle, said collar fitting the bore, and provided at the upper edge of its recess with an upwardly-extending securing plate, the opposite edges of said recess below the axle being
50 beveled, an L-shaped plate whose outer edge forms a continuation of the collar having its opposite edges grooved to receive said beveled edges, and provided upon its rear side
55 with a scraping-shoulder, and a clip for binding the parts upon the axle, substantially as specified.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures
60 in the presence of two witnesses.

FRANK SWEETLAND.

JOHN FAULKS.

Witnesses:

R. L. BROWN,

HOMER PARKER.