

W. J. MOLONEY.
CAR STAKE.

APPLICATION FILED AUG. 2, 1911.

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Patented Apr. 2, 1912.

2 SHEETS—SHEET 1.

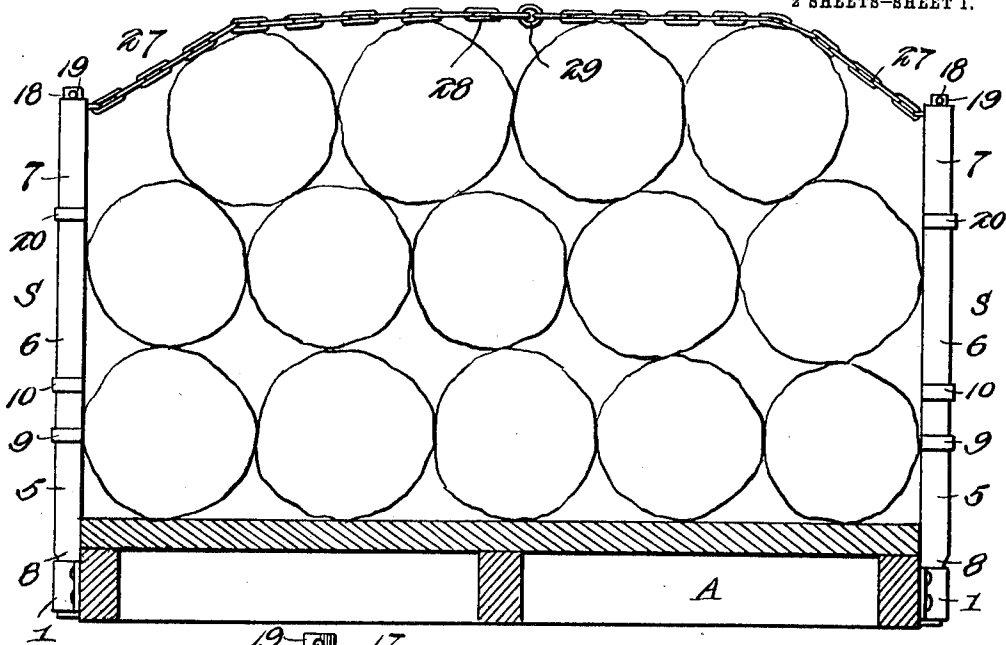


Fig. 1.

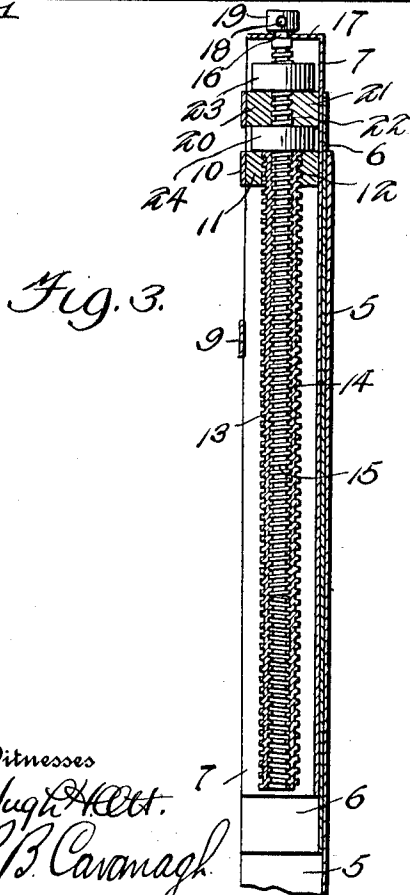


Fig. 3.

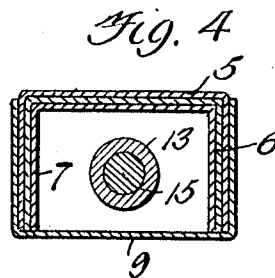


Fig. 4.

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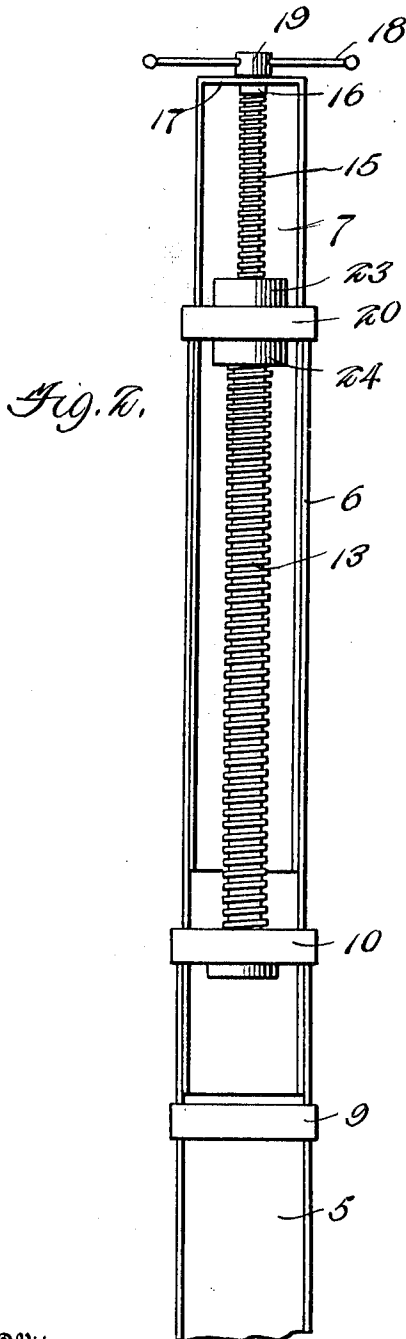
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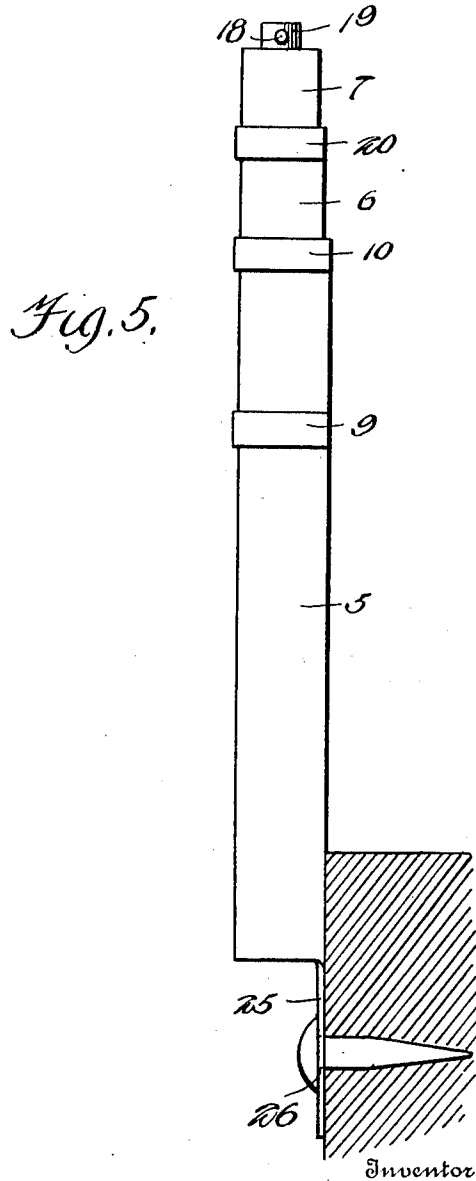
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2 SHEETS-SHEET 2.



Witnesses

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UNITED STATES PATENT OFFICE.

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CAR-STAKE.

1,022,105.

Specification of Letters Patent.

Patented Apr. 2, 1912.

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To all whom it may concern:

Be it known that I, WILLIAM J. MOLONEY, a citizen of the United States, residing at Oakland, in the county of Alameda and State of California, have invented new and useful Improvements in Car-Stakes, of which the following is a specification.

This invention relates to certain novel and useful improvements in car stakes, and has particular application to adjustable car stakes adapted to be employed in connection with flat cars such as are commonly employed in transporting lumber and other material.

As is well-known, it is usually customary for flat, lumber-carrying cars to be provided with sockets, usually eight in number, secured to the sides of the car, which sockets are designed to receive the wooden standards or posts for holding the timber in position on the car. Extending over the load of timber and connecting opposite posts at the top are usually placed wooden bars, to hold the load when the car is taking curves and switches. But the employment of such an arrangement of stakes has been found unsatisfactory, for the reason that the stakes are usually splintered and broken by the heavy logs on the cars and the cross bars are generally capable of being used but once, inasmuch, as they are also broken or otherwise injured when removing the same from the top of the stakes for the purpose of unloading the car. To obviate the objections incident to the ordinary wooden standards and posts, it has been proposed in some instances to employ adjustable metallic stakes, but so far as I am aware, the latter have been of such expensive and cumbersome construction that they have not proved satisfactory as substitutes for the common wooden posts or stakes.

In carrying out my invention, it is my purpose to provide an adjustable metallic car stake which may be manufactured and marketed at a relatively low cost, and which will embody in its construction the desired features of strength, durability, efficiency and convenience, and which will prove a cheap and satisfactory substitute for the wooden stakes commonly used.

I further provide an adjustable car stake in which the sections may be extended or retracted when desired, according to the height of the load upon the car, the stakes

at opposite sides of the car being connected by a chain or cable and firmly and securely binding the load.

Furthermore, by the use of my invention, I aim to dispense with the use of the large number of sockets at the sides of the car. Where in using wooden stakes at least eight sockets are usually employed, I aim to employ a less number, for instance six or three at each side of the car.

With the above recited objects, and others of a similar nature in view, the invention consists in the construction, combination and arrangement of parts, set forth in and falling within the scope of the appended claims.

In the accompanying drawings:—Figure 1 is a transverse sectional view taken through a logging car provided with my improved car stakes. Fig. 2 is a perspective view of one form of stake embodying my invention. Fig. 3 is a longitudinal sectional view, taken through the same. Fig. 4 is a cross sectional view through the car stake. Fig. 5 is a view in side elevation of a modified form of my invention.

Referring now to the accompanying drawings in detail, the letter A designates an ordinary flat car such as is usually employed for transporting timber. Arranged at opposite sides of the car are the sockets 1—1, and it will, of course, be understood that any suitable number of sockets may be employed. In case of my invention, I usually employ six sockets, three at each side of the car.

My improved logging stake, such as shown in Figs. 1 to 4, inclusive, is indicated as an entirety by the letter S and is formed of three telescoping sections 5, 6 and 7. Each of these sections is formed of a suitable metal such as iron, the sections being approximately U-shaped in cross section. The lowermost section 5 is tapered at its lower end as at 8 for insertion in the holding socket at the side of the car, and is provided with the guide and retaining bands 9 and 10, respectively, suitably spaced apart. The band 10 which is at the top end of the lower section of the stake carries a block 11 having a threaded bore 12 therein for the reception and working of the tubular screw rod 13, the door or opening 14 through said rod being also interiorly threaded for the reception of the second screw rod 15, the

upper end of which projects as at 16 through the end plate 17 of the upper section 7 of the stake. The end of the second screw rod 15 which projects through the end plate 17 is provided with an operating handle 18 extending through the nut 19 on the end of the rod.

The numeral 20 indicates a collar at the upper end of the rod 15 and adapted to bear against the inside of the end plate. The second section 6 is also provided at its upper end with a band 20 extending across the open face of the channel iron, said band carrying a block 21 lying within the channel which block is provided with an opening 22 for the passage of the first screw rod. Above and below the block 21 the tubular screw rod is provided with nuts 23 and 24, respectively, which rotate with the rod, but are held against longitudinal movement.

From the above description, taken in connection with the accompanying drawings, the construction and manner of employing my improved invention will be readily apparent. In loading the car, the logs or other articles are first placed thereon until the load is a predetermined height, for instance, about three feet and the stakes in their collapsed or telescoping positions are then inserted in the sockets. The loading is then continued and as the height of said load increases, the handle is operated to rotate the screw rods, and, inasmuch, as the top nut of the lower screw rod is against the collar of the upper rod, said lower or tubular rod will rotate or turn thereby extending the intermediate or upper section of the stake. The height of the load further increasing, it is desirable to extend the upper section of the stake and this is accomplished by continuing the rotation of the handle, which will cause the top screw rod 15 to thread out of the tubular rod, thereby elevating the top section.

In unloading, the operation is reversed, the top section being first telescoped by turning the handle in the direction reverse for extending the stake, and after the top section has been telescoped within the intermediate section, the latter is in turn telescoped in the lower section upon the rotation of the tubular screw rod which occurs when the top collar of the upper rod 15 bears or jams against the top nut of the lower tubular screw rod.

In Fig. 5 I have shown a slightly modified form of my invention, in this case the free end of the lower stake section instead of being tapered to fit into the socket is provided with a downwardly extending disk-like projection 25 perforated at 26 for the reception of a pivot bolt by means of which the stake may be pivotally connected to the side of the car, so that when not in use it may be folded down to lie alongside the car

frame and be held at its opposite end by any suitable means such as a bracket, (not shown).

In order to bind the load of logs or other material, upon the car, I provide a chain or cable 27, which extends between the tops of opposite stakes, as shown in Fig. 1. After it is placed in position, the chain may be tightened to hold the load by screwing down or telescoping the top sections of the stakes in the intermediate sections, and conversely when it is desired to unload the chain may be slackened by elevating the top sections of the stakes.

It will be seen that I have provided a simple, efficient and durable substitute for the ordinary wooden stakes, and, furthermore, my improved adjustable stakes may be used time and again, as they are constructed of metal and are, therefore, not liable to be easily injured or broken.

While I have herein shown and described the particular embodiment of my invention, I wish it to be understood that I do not limit myself to all the precise details of construction herein set forth, as modification and variation may be made without departing from the spirit of the invention or exceeding the scope of the appended claims.

I claim:—

1. A car stake comprising a plurality of telescoping members, a threaded screw rod for extending and retracting one of said members relative to the other, and means for rotating said screw rod.

2. A car stake comprising a plurality of metallic telescoping sections, a block having a threaded bore therein carried by the lowermost of said sections, a second threaded block carried by the section telescoping in the lower section, a threaded rod passing through the threaded bores in the blocks, and members arranged on said rod above and below the block on the telescoping section, and means for rotating said rod.

3. A car stake comprising a plurality of metallic sections adapted to telescope one within another, a tubular threaded rod extending through the lower section and connected to the adjacent section, a second rod threaded into the tubular rod and connected to the upper section of the stake, and means for rotating the rods to raise and lower the sections of the stake.

4. A car stake comprising a plurality of metallic sections telescoping one within the other, a threaded block arranged adjacent to the top of the lowermost section, a second threaded block at the top of the intermediate section, a tubular threaded rod extending through the threaded blocks, collars arranged on the tubular rods above and below the block of the intermediate section, the second rod connected to the upper section of the stake and threaded into the tubular rod,

a collar fast to the top of the second mentioned screw rod, and a handle for actuating the rods to raise and lower the sections of the stake.

5 5. The combination with a car, of a plurality of car stakes arranged at opposite sides, each stake comprising a plurality of telescoping sections, and a plurality of screw rods for raising and lowering said sections,
10 and a chain adapted to connect the top sections of the rods to hold the load upon the car.

6. The combination of a car stake com-

prising a plurality of telescoping sections, enlargements formed at the lower end of the lower section and provided with an aperture for the reception of a pivot pin for pivotally securing the stake to a car, and screw rods for extending and retracting the sections of the car stake. 15

In testimony whereof I affix my signature 20
in presence of two witnesses.

WILLIAM J. MOLONEY.

Witnesses:

JOHN PENNINGTON,
DANIEL P. COLEMAN.

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