Nov. 11, 1930. R. A. TAYLOR 1,781,350

TENT STAKE

Filed April 26, 1929

Fig. 1

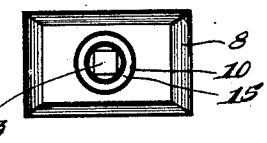


Fig. 2.

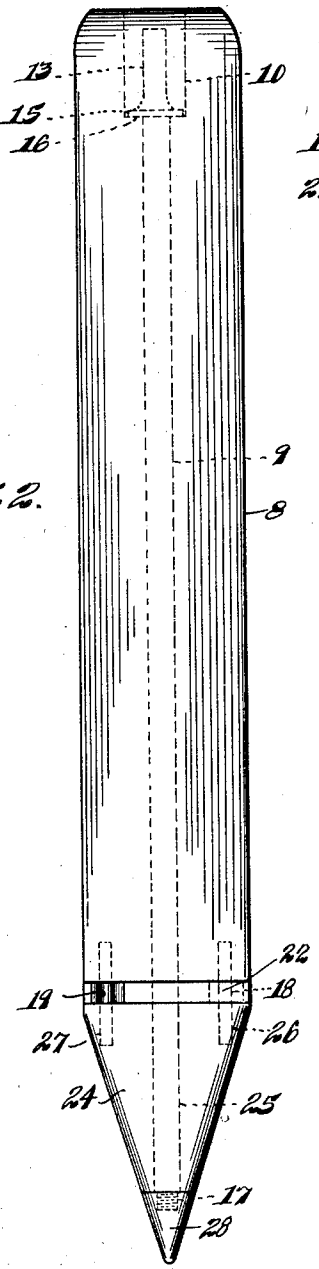
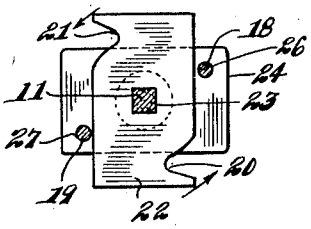


Fig. 3



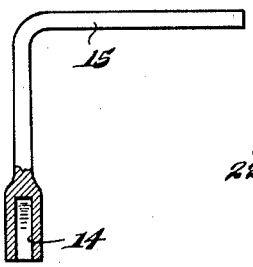
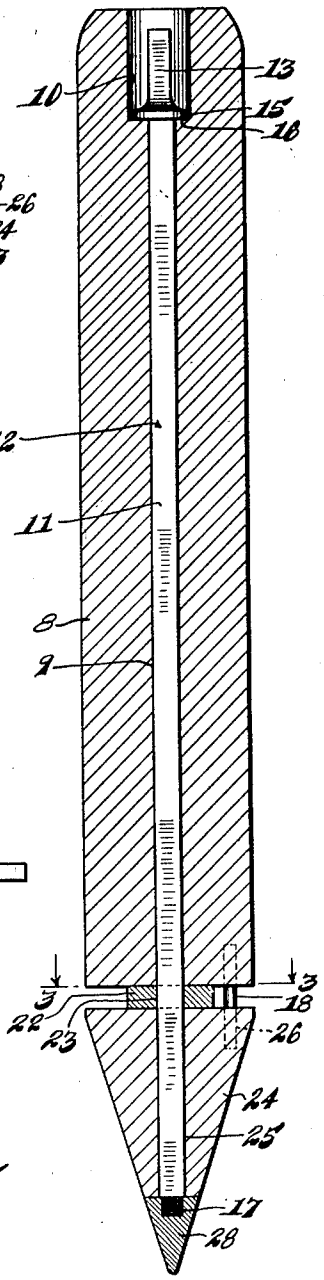


Fig. 5

Fig. 4



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UNITED STATES PATENT OFFICE

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TENT STAKE

Application filed April 26, 1929. Serial No. 358,257.

This invention relates to certain new and useful improvements in tent stakes and the like having for its object the provision of a stake of the kind described of comparative simple, yet rugged construction, and particularly adapted to resist removal from the ground when imbedded therein.

Another object of the invention is to provide an improved stake adapted as a means of securely anchoring guy ropes, attached to tents, building structural units, etc., etc., in a more secure manner than provided by conventional implements of this nature.

The invention consists in the details of construction and in the combination and arrangement of parts hereinafter pointed out, reference being had to the accompanying drawings, in which

Fig. 1 is a top plan view of the device in position to be driven into the ground;

Fig. 2 is an elevational view of the device shown in Fig. 1;

Fig. 3 is a sectional view of the device after the locking means are brought into play, taken on line 3—3 of Fig. 4;

Fig. 4 is a vertical sectional view of the device, as disclosed in Fig. 3, and

Fig. 5 is a plan view of the key, partly in section, which locks my device after being driven into the ground.

In the drawings, 8 designates an oblong block of substantially rectilinear configuration and having a central bore or passageway 9 communicating with a recess or pocket 10 formed at the upper end of the block 8. The bore 9 accommodates the shank 11 of a rod 12 which has a squared upper end 13 adapted to be received in a corresponding square opening 14 of a key 15 for a purpose which will hereinafter appear. The shank 11 has an annular shoulder 15 which seats on the floor 16 of the pocket 10 while at its other end, the shank 11 has a threaded end portion 17.

The lower end of the block 8 has two prongs or stop pins 18, 19 which pass through arcuate slots 20, 21 formed in a plate 22 having a square hole 23 through which the square shank 11 of the rod 12 is passed. As clearly shown in Fig. 4 a detachable end member 24 having a bore 25 to receive shank 11 is also provided, it being observed that two elongated pockets or recesses 26, 27 are formed in the top surface of the end member 24 for the reception of the stop pins 18 and 19 respectively, which latter confine the movement of the plate with an arc of 90 degrees, or from a position where its sides are in alignment with the sides of the block 8 to a position where its two opposed longest sides are protruded at right angles to the two broadest opposed sides of the block 8. On the threaded end portion 17 of the shank 11 a metal tip 28 is secured, this tip being of substantially conical shape, merging with the tapering sides of the end member 24, for the purpose of providing an efficient ground piercing element for the stake embodying my invention.

The manner of operating my device is briefly as follows: The entire stake is driven into the ground with any suitable implement such as a mallet, hammer, etc. to within a few inches of the top. The square opening 14 of the key 15 is now fitted over the registering squared upper end 13 of the rod 12 and then given a quarter turn, thus swinging the plate 22 into a position at right angles to the body of the stake, as clearly shown in Fig. 3 wherein my device is illustrated in operative condition. It will be observed that since the body of the stake or block 8 is of substantially oblong rectilinear configuration, the resistance by reason of the increased surface presented by the plate 22 in the position to which it is now turned will be augmented, thereby substantially opposing removal of the stake from the ground. It will be noted that the stop pins 18 and 19 limit the turning of the plate 22 to the operative position where it is protruding at an angle of 90 degrees to the two broadest sides of the oblong body of the block 8. When it is desired to remove the stake, the key 15 is again applied to the squared upper end 13 of the shank 11 and the plate 22, then restored to its original position by turning the key 15 to restore the plate 22 to a position where its periphery is in alignment with the peripheral sides of the block 8,—the stake may now be removed.

While I have designed the present stake principally as a means for securing tents and guy ropes leading to various supporting and covering structures, many other uses will readily suggest themselves in those arts where a necessity exists for means providing a secure anchorage for any appropriate purpose.

It will be apparent that the device as described and illustrated may be modified and changed without departing from the spirit or sacrificing any of the advantages of the invention; hence I do not confine myself to the precise details of construction but desire to avail myself of such variations and modifications as fairly fall within the scope of the appended claims.

What I claim as new and desire to secure by Letters Patent is:

1. In a device of the kind described, in combination a sleeve, a rod within said sleeve, means to turn said rod relatively to the sleeve to present an additional element on said rod increasing resistance of said device to removal from the ground, and means to limit the turning of said rod relatively to said sleeve.

2. A stake of the kind described comprising a sleeve having an upper recess communicating with a channel, a rod receivable in said channel, said rod having a squared end protruding into said recess, said rod having a plate mounted thereon adapted when rotated by said rod to swing into a position substantially at right angles to the lower end of said sleeve thereby presenting a substantially augmented surface increasing resistance against removal of said stake from the ground when imbedded therein.

3. A stake of the kind described comprising a sleeve having a central channel therethrough, said channel communicating with an upper recess at the upper end of said sleeve, a rod turnably mounted in said channel, said rod having a plate thereon, a squared end on the upper portion of said rod protruding into said upper recess and adapted to be engaged by a key, whereby said rod may be turned to swing said plate to a position transverse to the lower end of said sleeve to present an augmented ground engaging surface for preventing removal of said stake from the ground.

4. In a device of the kind described, in combination, a sleeve of substantially oblong configuration in cross section, said sleeve provided with a channel, a rod turnably mounted in said sleeve, and a plate mounted upon the lower end of said rod at right angles to said sleeve, said plate being of greater length than the width of said sleeve, whereby means are provided to securely retain said device in the ground after said plate has been swung transversely to said sleeve.

5. A stake of substantially oblong configuration when viewed from a plane immediately thereover, said stake comprising an outer sleeve having an interior channel, a rod turnably mounted in said sleeve, said rod provided with a squared upper end and a threaded lower end, and a plate mounted upon the threaded lower end of said rod, said plate being of greater length than the width of said sleeve, whereby when said plate is turned a new surface is presented increasing resistance to the removal of said stake from the ground after being imbedded therein.

6. In a device of the kind described, in combination, a sleeve of noncircular cross section having a central channel therethrough, a rod turnable in said channel and provided with an upper squared end adapted to be engaged by a registering key, and a plate of the same configuration as the cross sectional outline of said sleeve secured on the lower end of said rod, whereby said plate is adapted to be turned to present an increased surface to resist removal of said device from the ground when imbedded therein.

7. A stake of the kind described of substantially oblong configuration in cross section, said stake comprising a block having a central passageway therethrough communicating with a widened annular channel at the upper part of said block, a rod turnably mounted in said passageway, a tapered member detachably mounted upon the lower end of said block, a plate secured to said rod, a plurality of stop pins disposed in the path of said plate, said plate having a plurality of grooves adapted to engage said pins, and a ground piercing tip threaded upon the lower end of said rod and adapted to clamp said tapered member against said plate, whereby said plate is normally maintained with its edges in alignment with the sides of said block, but adapted when said rod is turned to swing at right angles thereto.

8. In a stake of the kind described, a block of noncircular cross section having a central channel therethrough, a rod mounted in said channel, a detachable member nonrotatably secured at the lower part of said rod and provided with a pair of pin receiving recesses, a plate of approximate size and shape of the block section secured to said rod and adapted to be engaged between the lower end of said block and said detachable member, said block provided with a pair of grooves, a pair of pins fastened in the lower end of said block and passing through said grooves into said recesses, and a securing ground piercing member threaded on the lower end of said rod, whereby when said rod is turned the plate will swing in a position transversely of said block until arrested by the stopping of said pins in said grooves.

9. A device of the kind described, comprising an elongated rectilinear rod, a block of oblong section having a hole through which said rod is adapted to extend, a plate of ap-

proximate size and shape of the block section fastened to said rod at a point immediately below said block, a detachable nonrotatably mounted non-engaging tapering element secured on said rod, a nut threaded upon said rod and adapted to engage said non-engaging element to force same into contact with said plate, the upper portion of said rod having a squared end engageable by a detachable coacting key, and a pair of pins protruding from the lower end of said block, whereby when said key is applied to said squared end and said rod is thereby turned said plate will be swung out of peripheral alignment with said block to a transverse position until arrested by said pins.

10. A stake of the kind described, comprising an elongated block having a passageway therethrough, a rod turnably mounted in said passageway, means adjacent the block to limit the turning of said rod, and an element fastened to the end of said rod for securing said means on the rod.

11. A stake of the kind described, comprising a block having a passageway therein, a rod turnably mounted in the passageway, a plate secured to the rod, means on the block to limit the movement of said plate and consequently of said rod within an arc of 90 degrees, and means on the end of the rod for facilitating the entrance of said stake into the ground, said plate impeding the removal of said stake from the ground when the plate is turned by said rod to a position 90 degrees from its normal position relatively to the block.

In testimony whereof I have signed my name to this specification.

ROSCOE AARON TAYLOR.