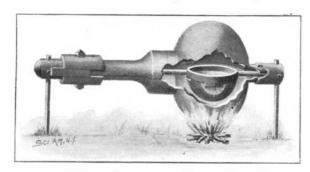
Scientific American



COOKING DEVICE FOR CAMPING PURPOSES.

In the accompanying illustration we show a device which will be found very convenient for camping

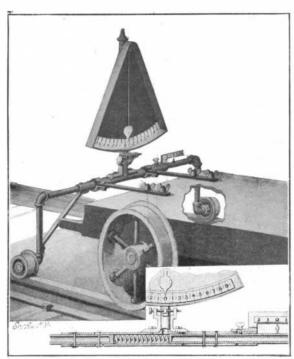


COOKING DEVICE FOR CAMPING PURPOSES.

parties, as it provides a simple means for frying, baking, or otherwise cooking food, and furthermore may be readily packed up and stored away when moving camp. The device consists of two bowl-shaped sections which may be fitted together to form a closed chamber within which the food may be cooked without coming in contact with the flames of the camp fire. Within the chamber is a pan on which the food to be cooked is placed. The pan is provided with handles at each end, which pass through tubular openings formed by trough-shaped extensions on the bowl-shaped section. The handles of the pan at their outer ends are formed with enlarged portions, on one of which a flange is formed which fits over the bowl extensions at that end, firmly locking them together. At the opposite end the bowl extensions are locked together by a sleeve which is slipped over them; this sleeve is held in place by bolts passing through slots therein and threaded into the handle of the pan. The device is supported on stakes which are driven into the ground and at their upper ends enter sockets in the enlarged portions of the pan handles. The longer handle is made tubular so that when the device is not in use the stakes may be packed therein. A cap is provided to close the end of this handle. When desired the device may be taken apart and the bowl sections used as saucepans. It will be observed that a bowl is secured under the pan. Water may be placed in this bowl to furnish the necessary moisture for the food that is being cooked. The inventor of this device is Mr. James Henault, 1428 West 12th Street, Los Angeles, Cal.

AUTOMATIC TRACK GAGE.

The automatic track gage which is illustrated herewith may be readily attached to the ordinary handcar in such a manner that the exact elevation of curves and the variations in the distances apart of the rails of a track may be accurately and quickly ascertained. In other words the exact state of the track, both as to gage and level, may be observed at a glance by the operator of the machine. The gage comprises an inverted U-shaped frame to the ends of which flanged wheels are journaled. These wheels are adapted to run on the tracks in advance of the handcar to which the gage is attached by means of two bars. The horizontal bar of the frame consists of two members which are connected by a tubular sleeve slipped over their inner ends. One end of this sleeve is connected with one



AUTOMATIC TRACK GAGE.

of the arms by a brace bar, as shown in our illustration. The other arm is secured to the sleeve by bolts which pass through slots in the sleeve, thus permitting a limited sliding movement of the arm in the sleeve. A coil spring in the sleeve exerts a constant outward pressure on this arm and a pointer on the arm indicates the position of the arm on a gage scale attached to the sleeve. Centrally secured on the sleeve is a standard bearing a segmental dial or measuring scale. A heavy pendulum pivoted at the upper end of the standard bears a pointer which, when the device is level, lies directly in line with the zero mark on the dial. In operation any irregularities in the track will be immediately indicated either on this dial or on the gage scale. If the track is not level, the pendulum will swing to one side or the other indicating exactly how much out of true the track is; while if the width between the rails of the track varies from the standard the movable arm will either be crowded inward or permitted to move outward correspondingly, and indicate the variation on the scale. The gage scale and the dial are each made adjustable so that they can be accurately set to bring the zero marks in line with their respective pointers. The inventors of this device are Messrs. Thaddeus Ellis and George H. Purvis, of Lester, Wash.

SPUR ATTACHMENT FOR LEGGINGS.

A recent invention provides an improved detachable spur attachment for leggings such as are used by cavalrymen and other horsemen. The device is so arranged as to permit ready and convenient removal of the yoke and rowel from the legging whenever the horseman so desires. As shown in our illustration, the design of the spur attachment is very simple. A strap of stiff leather is secured to the legging at the rear, preferably on the inside. A portion of this strap projects below the legging, and carries a metallic disk on which the yoke is removably secured. Thus the



SPUR ATTACHMENT FOR LEGGINGS.

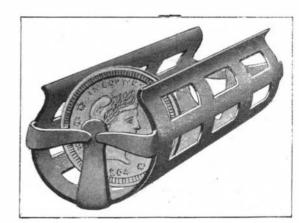
spur is held at about the same position with respect to the foot that spurs are ordinarily held. In our detail view the rowel and part of the yoke have been broken away, to clearly show the simple locking means used for holding the voke to the disk. It will be observed that two pins are secured to the disk, and project through openings in the base plate of the yoke. A lock bar is fulcrumed centrally on the outer face of the base plate, and is adapted to be swung into engagement with notches in the pins. One end of the lock bar is extended to form a handle. A pin secured to this extension snaps into a registering aperture in the disk when the bar is in locked position. Now, if for any reason the horseman should find it desirable to remove the spur, he needs simply to swing the lock bar out of engagement with the pins, when the voke and its rowel may be detached from the legging. The inventor of this improved spur attachment is Capt. William Carey Brown, First U.S. Cavalry, of Fort Clark, Texas, Brackettville P. O.

A HANDY COIN HOLDER,

A simple little device has been invented by Mr. Adna G. Bowen, of 401 West 124th Street, New York city, which is adapted to hold coins of a predetermined number. This improved holder is so arranged as to closely fit both new and worn coins. This is an important point, for it is a well-known fact that a number of new coins makes a much higher pile than the same number of old coins, and heretofore it has been necessary to make three sizes of coin holders for every denomination.

As shown in our illustration, the body of the clip is cylindrical in form and has an opening along the top, throughout its entire length, of about 150 degrees in width. It is made of spring metal, which yields when the coin is pressed endwise into the holder, and after the coin has passed into the cylinder body, the spring metal sides close over the coin, and hold it

from falling out of place. At the ends of the holder tongues are provided, which give sufficiently to allow the coins to pass into the body of the holder, yet are sufficiently strong to compel the same to stand upright in mass. These tongues normally incline inwardly to a sufficient degree, and have sufficient spring to



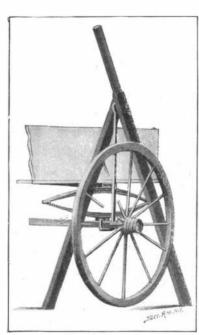
A HANDY COIN HOLDER.

take up any variation in the thickness of the quantity of coins interposed between them.

LIFTING JACK.

A recent invention provides a very simple device for lifting the axles of vehicles, to permit removal of the wheels. A glance at the illustration will reveal the construction of the device, and the method of operating it to lift the axle. It comprises two wooden bars and a swinging or suspension bar, which are all pivoted together at a common point by a single bolt, The longer one of the wooden bars is provided with a handle, by which the device may be operated. The hanger piece consists of a flat metallic bar bent to form a foot piece at its lower end. It is loosely suspended from the bolt between the bars, being spaced apart from the latter by means of washers to permit free movement. In using the lifting jack, the wooden bars are placed astride of the axle. The freely-moving hanger falls against the axle, and quickly adjusts itself to any height of the axle when it is lifted, so that when the handle of the longer bar is pulled backward or forward, according to the position in which it is placed, the hook of the hanger is brought upwardly against the axle, and lifts the wheel clear of the ground, after which a movement of the hand or foot of the operator presses the shorter bar into engagement with the ground, and firmly secures the jack in position. When the axle is thus suspended, it is so securely held by the jack that a chance lateral movement of the vehicle or a forward or backward movement of ten or twelve inches may be made without loosening or dropping the axle, because the swinging hanger adjusts itself to the position of the axle. In fact, the hanger prevents the vehicle from moving down a slight incline, such as a slanting washing floor. The bars of the jack are of sufficient height to permit the device to be easily adjusted to an axle without stooping or requiring the operator to pass between the wheels and the body or the shafts of the vehicle. The Rev. M. M. Moore, Sr., of Santa Barbara, Cal., is the inventor of this improved lifting jack.

A dispatch from Winnipeg, Manitoba, says that Hugh Mann, brother of D. D. Mann, vice-president of the Canadian Northern Railroad, was accidentally killed on September 11 near Erwood, N. W. T., while superintending the operation of a new track-laying machine of which he was the inventor and which was being used for the first time.



AN IMPROVED LIFTING JACK.