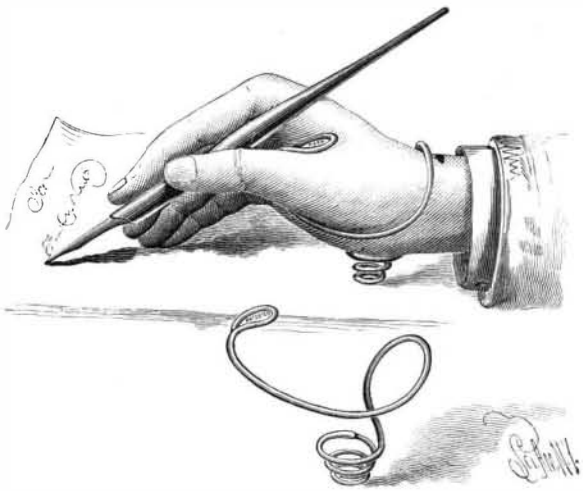


A HAND REST FOR PENMEN.

The illustration represents a device designed to constitute an elastic cushion or rest for the hand in writing, whereby the muscles of the arm will be relieved of the weight of the hand, and a general freedom of

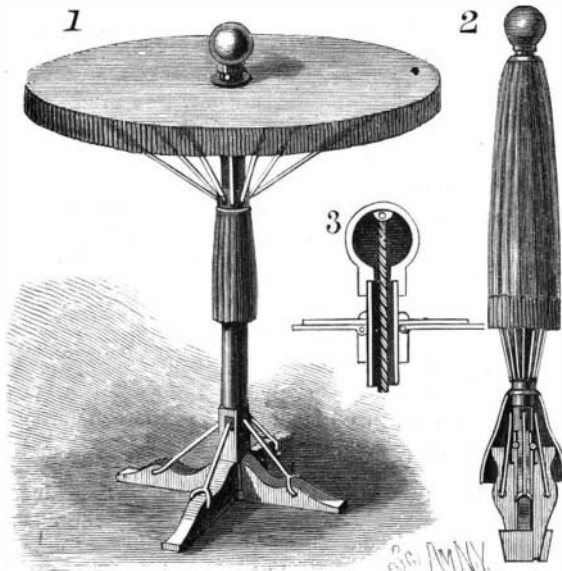


ELLIS' HAND REST FOR PENMEN.

action and elastic hold and pressure of the pen on the paper will be secured. It has been patented by Mr. George F. Ellis, of No. 898 Third Avenue, New York City. The device is preferably formed of spring wire, bent as shown, that part of the wire coming against the flesh being preferably covered with a flexible sheathing, such as a piece of rubber tube, and forming also a pad adapted to give only a soft or gentle pressure on the hand. The lower end of the coil or cushion is not covered with rubber, and is flattened down to reduce friction upon and facilitate its movement over the paper when writing. The whole device is readily removed from the hand when not required by simply springing the wire sufficiently for such purpose.

AN IMPROVED FOLDING TABLE.

The illustration represents a table designed to be folded up and opened in substantially similar manner to an umbrella, occupying but little room when closed, while capable of being so decorated that when opened for use it will constitute an ornamental piece of furniture. It has been patented by Mr. A. J. Delavigne, of No. 119 Barracks Street, New Orleans, La. The table has a central standard, hollow for most of its length, and having a slot in opposite sides. A slight distance below the top of the standard a series of straight ribs is hinged, radiating from the center, each rib having a stretcher rod hinged at one end to the rib and at the lower end to a traveler sliding upon the standard. Upon the upper end of the standard is a hollow ball or equivalent ornament, with attached sleeve, by which it can be readily placed on or removed from the standard, as shown in Fig. 3. The traveler in the central standard has a cross bar extending through the side slots, a rope extending from this cross bar to attachment within the ball at the top. Below the traveler the rope is divided into four strands, extending out through openings, in each of which a friction roller is journaled, and each strand being secured at its outer end to a leg. The inner side of the leg is straight and the legs are adapted to be folded up against each other, when their lower ends may be inserted in a ferrule, as shown in Fig. 2. When the table is to be set up, the ferrule is removed, and the central ball drawn up with its attached rope or cord, the latter drawing up the traveler and carrying the ribs to a horizontal position, the traveler then being held in such position

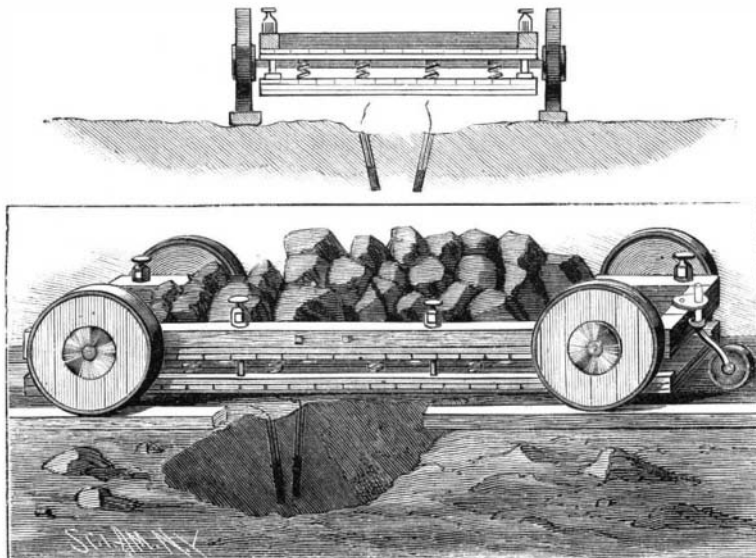


DELAVIGNE'S FOLDING TABLE.

by a bow spring, such as commonly employed to hold an umbrella open. As the ball is drawn upward to open the table, the lower strands of the rope are also drawn upon to cause each leg to assume a horizontal position at the base of the standard. After the table has been secured in the open position, the slack of the rope is passed into the standard and the ball replaced, as shown in Fig. 1. Any desired material may be employed, with perhaps a margin of fringe, and a curtain to be secured to the runner, in such way as to hide the operative parts without interfering with their action.

AN IMPROVED BLASTING CAR.

A car specially designed for firing a blasting charge in a quarry, street, or other place, without injury to persons or property from the flying material thrown up by the explosion, is represented in the accompanying illustration, and has been patented by Mr. Andrew R. Shannon. The platform of the car has a strong rectangular frame of wood, its corners re-enforced by metallic binding plates, and the sides of the frame bound together by suitable cross rods, and on this frame is formed a bottom of two layers of planks to support a load of stones, pig iron, earth or any other heavy material to hold the car in place. The wheels are preferably of wood, with iron bands to withstand concussion, and each has a steel tire adapted to run on wooden tracks, the axles being preferably of metal and square in cross section. Below the main bottom of the car is a false bottom, also formed of two layers of planks, the lower one covered on its under side with half inch boiler iron or steel. The false bottom is supported on vertical bolts, as shown in the sectional view, whereby such bottom may be raised and lowered as desired, and so the bottom can slide upward on them, and between the two bottoms are held springs, making the false bottom yielding in case of pressure from underneath. On the front beam of the car frame is a caster wheel, to facilitate moving the car from



SHANNON'S BLASTING CAR.

place to place, the car being designed to be moved into position over a trench in a street, or other exposed locality in solid rock where a blasting charge is to be fired. The car is also patented in Canada, and was used with best results in the construction of water works at Belleville, Kingston and Napanee, Ontario, many miles of trench being excavated in the streets and through the business parts of the above cities, and not a single light of glass was broken in the whole work on which the car was used.

For further particulars in relation to this invention, address Messrs. Moffett, Hodgkins & Clarke, Syracuse, N. Y.

The Names of American Scientists for the Titles of Practical Electrical Units.

As our readers are aware, the custom of naming electrical units from the great investigators and students of the science, so far to the exclusion of Americans, has become firmly established. Almost the only break recently to be noticed is in the attempt to get a name, "mho," for the unit of conductivity by reversing the letters of the unit of resistance, the "ohm."

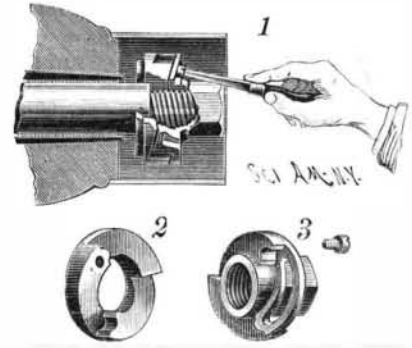
Accordingly, the American Institute of Electrical Engineers have taken the matter in hand, and in pursuance of a resolution offered at a meeting of June 17, 1890, by Mr. Francis B. Crocker, propose that American scientists should receive recognition. They propose that Benjamin Franklin and Joseph Henry, one or both, should be thus honored. As the latter was the discoverer of self-induction, his name should certainly be given to the practical unit of this function.

At present this unit indicates another departure from the "personal name" system, being termed a quadrant—certainly a very confusing title from its other applications. Henry's discovery of self-induction was published as long ago as 1832 in Silliman's

Journal. For the honored name of Franklin no place is as yet proposed. The disagreeable "mho" might well be relegated to obscurity and "Franklin" put in its place.

AN IMPROVED ADJUSTABLE AXLE NUT.

A nut designed to be conveniently adjusted for taking up the end wear of vehicle hub boxes and



THORP'S ADJUSTABLE AXLE NUT.

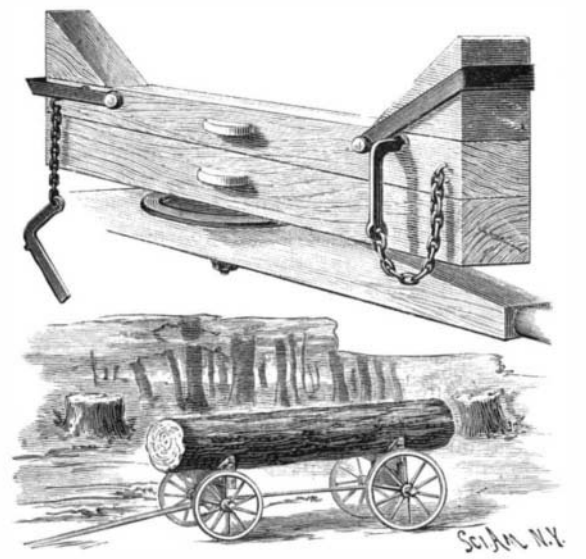
washers is represented herewith, Fig. 1 showing the operation of adjusting the nut. The set screw is loosened and moved down the slot, thereby turning the inner part so that the thicker portions of the cams come opposite, thus extending the nut inwardly until in contact with the box, the outer part remaining stationary against the shoulder of the axle. Figs. 2 and 3 are perspectives of the two parts detached, showing the form of the engaging surfaces, the set screw, and the slot in which it is moved. This device obviates the necessity of fitting the washers, as they may be used of any thickness, and worn completely out before renewing, always insuring a firm and smoothly running wheel. Persons desiring to inquire further into the merits of this invention may address the patentee, J. M. Thorp, of Santa Rosa, Cal. A full-sized model will be furnished to those desiring such on receipt of \$1.

Patents that Pay.

"You have seen those toy woolly dogs which jump about on Fourteenth Street," said Thomas Harneroff, a patent lawyer, recently, "which are made to dance by pressing a little rubber ball. Well, the man who invented those made over \$6,000 out of his patent. The old-fashioned 'returning ball' coined a fortune for its inventor. Even the man who patented the hooks on lace shoes gets over \$300,000 a year in royalties for them. There is a fortune in small patents if you hit the popular taste."—N. Y. World, July 17.

AN IMPROVED BLOCK AND CLEVIS FOR LOG WAGONS.

The illustration represents a device for holding logs in place on a wagon, sled, or other vehicle, and consists in a triangular block adapted to rest upon the bolster, a clevis pivoted to the bolster in such a manner that it may be swung upwardly upon the block, with a peculiarly formed key for holding the clevis in position. This invention has been patented by Mr. William H. Miller, Sen., of Wyandotte, Ark. The clevis to hold the triangular blocks in position is pivoted to the bolster by a pin which passes through the bolster and both arms of the clevis, the latter swinging vertically on the pin. The clevis is held in its uppermost position, to hold the blocks in place to support a log, by means of an angular shaped key preferably made of flat iron. The key fits in a hole near the upper edge of the bolster, and has on its upper edge a lug, to be moved in a recess in the edge of the hole, whereby the key is held in place. The key is preferably attached to the bolster by a chain, to prevent its being lost or mislaid.



MILLER'S BLOCK AND CLEVIS FOR LOG WAGONS.