

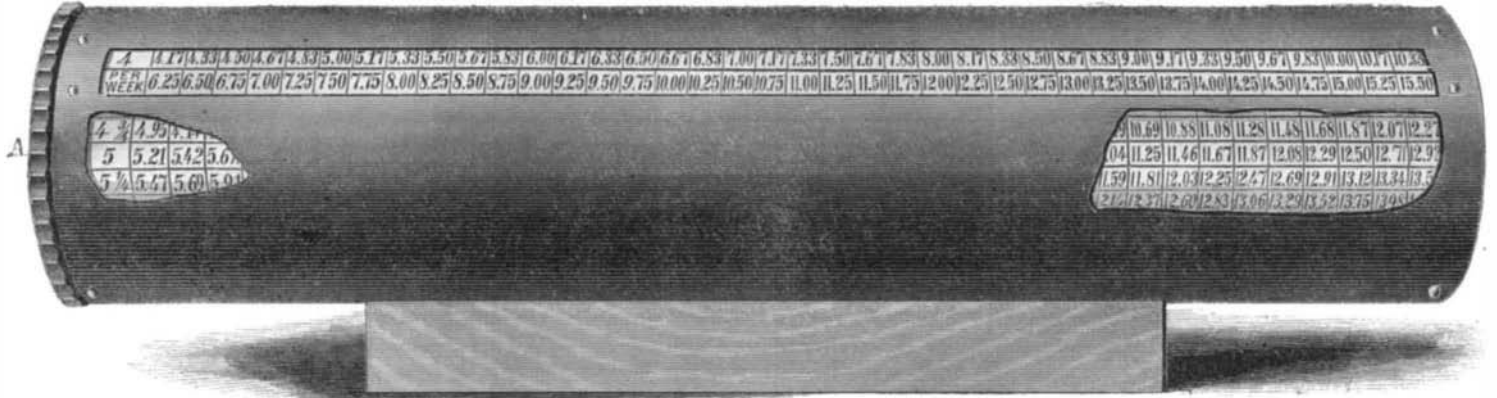
**Improved Calculator.**

Those who have persons in their employ to whom wages are paid at weekly, semi-monthly or monthly intervals, are often put to considerable inconvenience in making up their pay rolls with sufficient dispatch and accuracy. There is also liability to various errors in the ordinary modes of calculating wages. Calculated tables, which are generally used, having a multiplicity of figures exposed to view, are apt to confuse the eye, and for this reason

second an oyster, which appears to be fricasseed, as it is open and covered with herbs; a third, a rat *farcé*, and a fourth, a small vase filled with fried grasshoppers. Next comes a circle of dishes of fish, interspersed with others of partridges, hares and squirrels which all have their heads placed between their fore feet. Then comes a row of sausages of all forms, supported by one of eggs, oysters and olives, which in its turn is surrounded by a double circle of peaches, cherries, melons and other fruit and vegetables. The

packing will be expanded by the compression of the rubber. In practice the cup leathers are set so as to just fill the pump chamber, so that when the steam comes on the packing it will be forced out by the action of the load on the rubber, as before explained. It is thus easy to see that the friction of the packing is in proportion to the labor on it, if it be properly packed at first.

This mode of packing is well adapted for pumps with untrue barrels—such as old well worn pumps,



**PEALE'S CALCULATOR.**

are not entirely reliable. The book form of tables consumes too much time in finding the various rates of wages, each rate requiring a different page, and has the same disadvantages as the sheet form above-mentioned.

By the use of the instrument herein illustrated the various causes of error heretofore existing, in the making up of pay-rolls, are entirely avoided. It consists of a cylinder, on the surface of which is arranged a calculated table; the left-hand column contains the number of days and fractions of days to be calculated, namely, 1, 1 1/2, 1 1/4 days, and so on for any number of days, to suit, for weekly, semi-monthly and monthly payments. This cylinder is inclosed in a zinc case, and revolves therein on pins having a bearing in the ends of the case. It is easily moved by a milled head at the left end, and the whole is neatly mounted on a walnut base. Running nearly the entire length of the case is an opening sufficiently wide to expose but one row of figures at a time. Immediately below this opening is placed, on the outside of the case, a row of figures denoting the several rates of wages, from the lowest to the highest ordinarily paid. The operation of this instrument can be readily understood by presenting an example, as follows:—

To find the amount of wages necessary to be paid for 9 3/4 days at the rate of \$12 75 per week, or \$2 12 1/2 per day. Turn the cylinder by means of the milled head at the left end, until the figures 9 3/4, on the left-hand column, appear to view; then above the figures \$12 75, denoting the rate of wages, on the outside of the case, will be found \$20 72—which is the amount to be paid.

They are also arranged for calculating by the hour and half hour. This is a very useful contrivance.

For further particulars address C. W. Peale, No. 1,600 Hamilton street, Philadelphia, who will furnish machines at \$6 for weekly, \$8 for semi-monthly, and \$10 for monthly sizes.

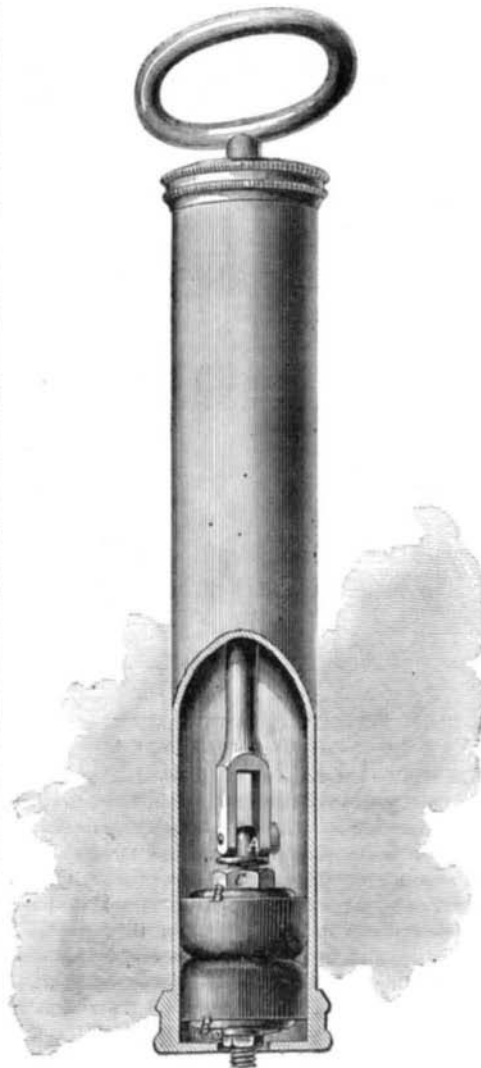
**Ancient Luxury.**

The excavations at Pompeii are going on with an activity stimulated by the important discoveries made almost at every step, and the quantities of gold and silver found, which more than suffice to cover the cost of the work. Near the Temple of Juno, of which an account was recently given, has just been brought to light a house no doubt belonging to some millionaire of the time, as the furniture is of ivory, bronze and marble. The couches of the triclinium, or dining room, are especially of extreme richness. The flooring consists of an immense mosaic, well preserved in parts, and of which the center represents a table laid out for a grand dinner. In the middle, on a large dish, may be seen a splendid peacock with its tail spread out, and placed back to back with another bird also of elegant plumage. Around them are arranged lobsters, one of which holds a blue egg in its claws; a

walls of the triclinium are covered with fresco paintings of birds, fruits, flowers, game and fish of all kinds, the whole interspersed with drawings which lend a charm to the whole not easy to describe. On a table of rare wood, carved and inlaid with gold, marble, agate and lapis lazuli, were found amphoræ still containing wine, and some goblets of onyx.—*Galvani*.

**ROWE'S PUMP PLUNGER.**

This invention illustrates a simple and certain



method for tightening the cup leathers used in pumps and hydraulic presses for packing. In arrangement it is a bolt, A, and two washers, B. There are two nuts on the bolt, and a rubber packing between the washers, so that as the nut, C, is screwed up, the

and insures the cup leather being used until entirely worn out. It is about to be adopted in the navy, constructor Hanscom having ordered the frigate *Guerrier* to be fitted with pumps having these pistons.

It was patented through the Scientific American Patent Agency on June 6, 1865, by P. C. Rowe, of Boston, Mass.

**Progress of Lock Making.**

In 1832 an English locksmith came to this country, settling at Watertown, Conn., and established himself in company with a resident of that town, in the manufacture of cabinet locks. They improved slightly on the old English make and finish. This experiment proved pecuniarily unsuccessful, and the Englishman sold out to one Terry, who removed the manufactory to Terrysville, and added thereto new men and more money. At that time the markets were stuffed with British goods, and the old English blacksmiths ridiculed the idea of American competition. In 1841, Mr. Terry sold out to Lewis & Gaylord, for six cents on a dollar of the capital stock. This new company progressed slowly, adding new and improved machinery, in its aid. In 1849 Mr. Lewis died, and the Lewis Company was formed by Mr. L.'s heirs taking the principal stock. In the meantime Bucknell, McKee & Co. had started the first trunk-lock manufactory in this country, and sold out in 1854, the companies consolidating into what is now generally known as the Eagle Company. Mr. Gaylord, of the original firm of Lewis & Gaylord, yet continues the lock business as a speciality, at Chicopee, Mass., and has accumulated a handsome fortune by his active industry. He is personally a worker, daily at the forge. For four years past the Gaylord Manufacturing Company has devoted all its labor to the supply of Government contracts for military accouterments. One hundred and ten men are now employed by the company, casting four hundred dozen keys, and making locks in proportion, every day. In March last their income tax amounted to over \$6,000; it averages \$3,000 per month. A new and commodious building is in process of construction for company offices and packing room, and they are just getting underway a steel-pen branch of their business.

**SAVINGS BANKS.**—In the interior towns of Massachusetts, New Bedford stands first, having savings deposits amounting to \$4,554,910. The next is Worcester, \$4,528,505; Lowell, \$3,848,158; Salem, \$3,019,504; Fall River, \$2,963,563; Charlestown, \$2,154,255; Springfield, \$2,076,323; Newburyport, \$1,955,133; Plymouth, \$1,151,353; Haverhill, \$1,061,736; no other place in Massachusetts has savings deposits to the extent of one million of dollars. The largest average to each depositor is in Fall River (\$310), and the smallest is in Plymouth (\$188 to each depositor).