

**DR. LE PLONGEON'S LATEST AND MOST IMPORTANT DISCOVERIES AMONG THE RUINED CITIES OF YUCATAN.**

(Continued from page 294.)

On the eighth day of the work, while Dr. Le Plongeon was making moulds in a grand castle, not very distant from the spot where he discovered the stone work illustrated in last issue, he suddenly heard much shouting, and soon a man arrived, breathless with excitement, to tell him that they had "found a queen"! Arriving at the spot [Plate 1] we saw a figure on its back, about one and a half meters north from the center of the monument, and exactly on a level with the surface of the earth. The figure was thickly coated with loose mortar. One leg was broken off below the knee, but we found it under the figure, and afterward adjusted it in place to make a picture. The head of the statue rested on a stone painted bright red, that represents the tongue of a serpent, the peculiar shape of which Dr. Le Plongeon long ago discovered to be the letter *chi* or *ch* of the Maya alphabet.

When the figure was placed upright we hardly knew what to call it, it appears so human, yet so apish. In the position it occupies it is ninety-seven centimeters (about three feet) high; so if standing would represent a very tall person. It is made of white limestone, and painted dark brown. The head is flat at the top and back, and apparently hairless, but painted blue, and over that are red streaks from the forehead down to the shoulders. The eyes are open, and painted blue round the lids. The nose is not pierced, but the clumsily made ears have each a large hole. The mouth is closed, and lips painted red. On the back part of the top of the head a hole is pierced, so that a string can be passed through, perhaps to secure a bunch of plumes, perhaps to keep a banner in place, for in the palm of the right hand there is a groove, as if for a round stick to fit in. The hands are not altogether human; where the fingers begin there seem to be mittens, the other ends of which are nowhere visible. [Plate 2.] The fingers, like the toes, were furnished with nails made of shell, and fitted in place with mortar, so as to look very natural, even in color. Unhappily, nearly all were fallen, but we found some of them. A necklace is indicated by a line of red paint around the throat. Garters, below the knees, are painted blue and red. The loins are covered with an ornamented *wit*, a scanty garment yet in use among the aborigines, and anciently worn by Egyptian laborers. The right foot is turned in, as if the individual had been club-footed. The sandals are painted blue, and close up round the heel, but the very elaborate and fanciful fastenings are red. On one heel is the name Cay Canchi, written with red paint. This image may possibly represent the sacred monkey of the Mayas, as the Cynocephalus was emblematic of the god Thoth among the Egyptians. On the facade of a very grand and extensive edifice at Chichen we see, close to a written and illustrated account of the creation, a figure exactly resembling the Cynocephalus of the Egyptians. We have also found it in Izamal and Usemah, both kneeling and sitting, and it was doubtless a much venerated object among the Mayas.

**Stimulants for Chrysanthemums.**

Last year I was induced to try an experiment in chrysanthemum growing, and for this purpose I purchased one pound of sulphate of ammonia, which I bottled and corked up, as the ammonia evaporates very rapidly. I then selected four plants from my collection, and put them by themselves, and gave them a teaspoonful of ammonia in a gallon of water twice a week. In a fortnight's time the result was most striking, for although I watered the others with liquid cow manure they looked lean when compared with the ammonia watered plants, whose leaves turned to a very dark green, which they carried to the edge of the pots until the flowers were cut. As a matter of course the flowers were splendid. The ammonia which I used is rather expensive, as I bought mine from a chemist's shop; this year I intend getting agricultural ammonia, which is much cheaper. I have also tried it on strawberries, with the same satisfactory result, the crop being nearly double that of the others; it is very powerful, and requires to be used with caution.—*The Gardeners' Chronicle.*

**Two Dangerous Parasites.**

One of the most dangerous to health and life of all the parasites infesting man is the *Dochmius duodenalis*. This nematoid worm was discovered by Dubini at Milan in 1838, and thirteen years later Griesinger made known its relation to a disease known as tropical anæmia, since which time

These larvæ are expelled in the fæces, and are believed to pass through their intermediate stages in dirty water, from which they are conveyed to the intestine of their unfortunate host by being swallowed by drinking.

Once in their proper habitat—the duodenum—they cut their way through the intestinal mucous membrane by means of their sharp hooks, and suck the blood; here they rapidly reach maturity. On their removal a tiny spot from which the blood oozes is left, surrounded by an area of congestion.

The disease caused by these bloodthirsty worms is known by the various names of Egyptian chlorosis, tropical anæmia, and anchylostoma disease. The symptoms are those of progressive anæmia (loss of red blood corpuscles), plus swelling and pain of the upper portion of the abdomen, diarrhœa, and intestinal hemorrhages. The affection is often accompanied with a longing for strange and in-nutritious substances, such as chalk, clay, and wool.

Tropical anæmia is usually a fatal disease, though if but few worms have been introduced into the intestine the symptoms are but slight, and life is not materially shortened. Victims of the disease may die in collapse within a few weeks or even days

after the first symptoms, or may drag on a wretched existence for months or many years.

Another terrible parasite is the Guinea or Medina worm (*Dracunculus medinensis*). It has been known from time immemorial, as there can be but little doubt of the "fiery serpents" which afflicted the Israelites being only examples of this nematoid, and Plutarch clearly refers to it in his "Symposiacon." The Medina worm measures from one to six feet in length, and is about one-tenth of an inch in thickness. The body is cylindrical, and terminates in a curved and pointed tail. The head is somewhat convex and flattened, and is provided with a central mouth surrounded by four equidistant papillæ.

The *Dracunculus* produces living young, the body containing an immense number of hatched embryos held within the uterine ducts.

The adult worm lives in the subcutaneous cellular tissue, especially that of the feet and legs, but may occur in almost any part of the body. In these situations it lies somewhat coiled, and sometimes stretched out, and single individuals or sometimes many examples are found in the same person.

By the irritation caused by its presence first an abscess—accompanied by various severe local and general symptoms—and then a consequent sinus is formed, from which the microscopic, sharp-tailed embryos already spoken of make their escape, never maturing in the tissues which contain the parent worm. These find their way into some pool of water, and there effect an entrance into the bodies of microscopic crustaceans belonging to the genus *Cyclops*. Here the embryos change their skins, increase in size, and complete their larval development.

Should one of these crustacean bearers with its contained parasites be swallowed with drinking water by man, the worms arrive at sexual maturity in the stomach of the latter, and here too sexual congress probably takes place. The females then make their way to the sites already mentioned, while the males probably die and are cast off in the fæces.

The Guinea worm, as its name suggests, is most common in North Africa and neighboring countries; it has, however, been found in almost all tropical lands. The attacks of this parasite are almost always accompanied with great suffering and injury to health, and even death is by no means an infrequent occurrence.

The order of the nematoid worms contains many genera dangerous to man, besides the two examples above described, among which may be mentioned the dreaded *Trichina spiralis*, and the little less dangerous *Filaria bancrofti*; the latter lives in the blood, and is the cause of a most dangerous and intractable form of chyluria and bloody urine.

RALPH W. SEISS.

At Norwich, England, a drive well has been put down to a depth of 157 feet, and might have been driven deeper if required. The tube was two inches internal diameter. At Montreal, Canada, a drive well tube has been driven 174 feet.

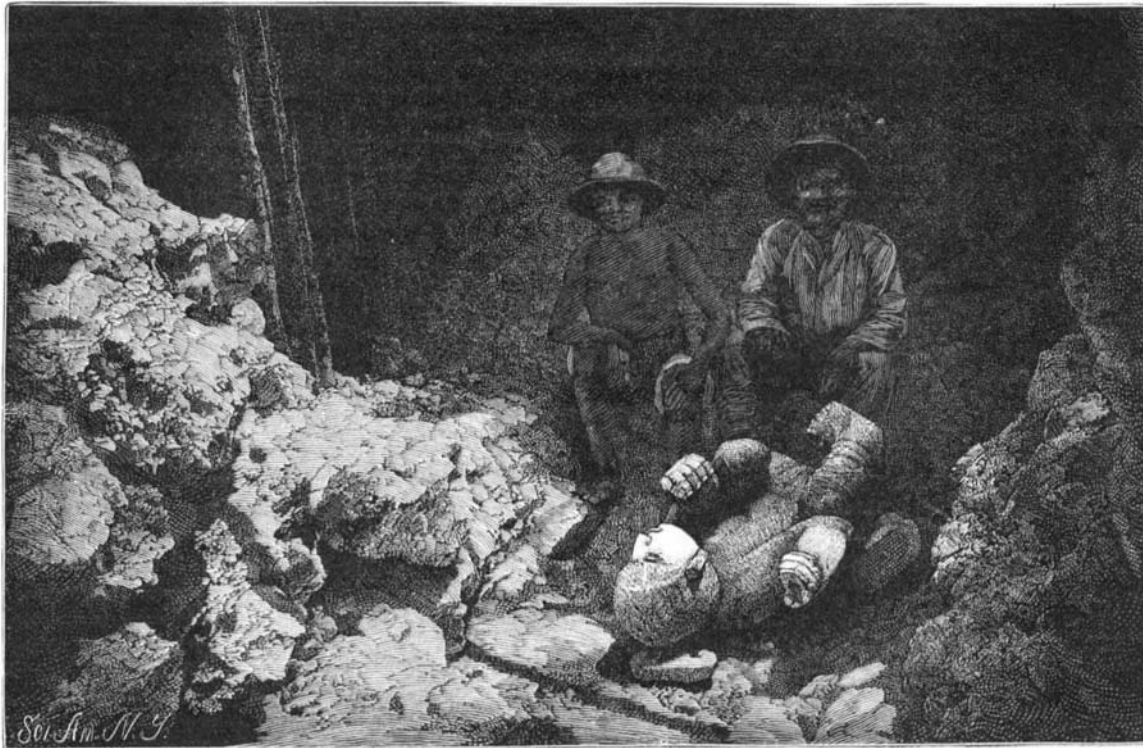


Plate 1.—DISCOVERY OF FIGURE IN MOUND.

many observers have noted its occurrence in Egypt, Brazil, Austria, and in most tropical and semi-tropical countries; throughout Northern Italy it is tolerably common.

The parasite may be described as follows: The male measures four lines, the female six lines in length; the head is tapering and pointed, and is flexed forward, the mouth being directed toward the ventral surface. The mouth is

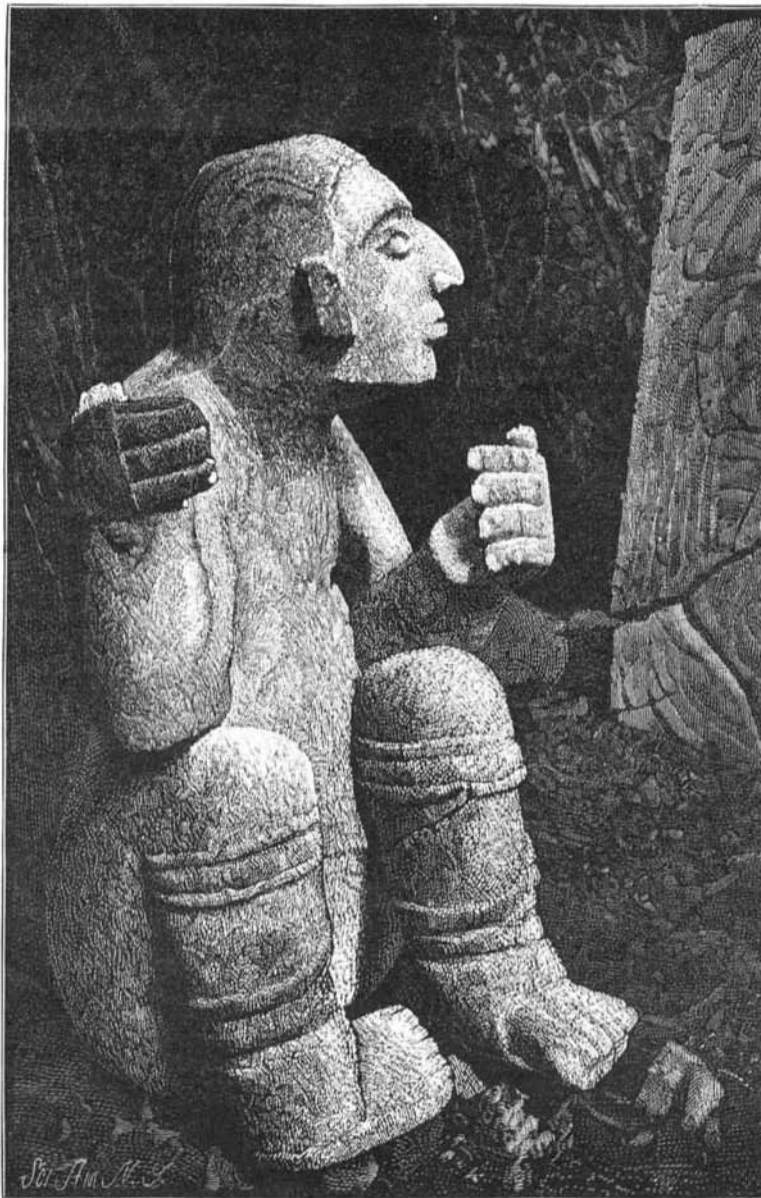


Plate 2.—THE FIGURE AS IT APPEARED WHEN SET UP

armed with four claw-like hooklets arranged irregularly, which converge toward the center of the oral cavity. The female has a sharp pointed tail; that of the male is blunt, and is provided with a bi-lobed, cup-like hood, which is supported by eleven horny rays—the median one dividing into two at its summit.

The females are much more numerous than the males, and the mode of reproduction is oviporous, the larvæ reaching maturity within the maternal body, and being expelled alive.



**Green Corn for Pigs.**

In the summer and early fall feeding of pigs, we have found sweet corn one of the best and most convenient kinds of fodder. Pork is made to the best advantage by putting the pigs, as soon as they are weaned from the sow and have learned to eat milk and meal, into the pen, and keeping them there under full feed until they are ready for slaughter in November or December. With a good breed of swine there is no difficulty in making March pigs weigh from 250 to 300 pounds at eight or nine months old. With plenty of Indian meal and skimmed milk they will grow rapidly until the corn is large enough for cutting. About the first of August, this should be given as an additional ration. The pigs will eat the green stalks and leaves with the greatest relish after the ears have been plucked. It is an excellent appetizer, helps the digestion of more solid food, and promotes the thrift of the animals. Field corn may not be quite so nutritious, but no better use can be made of that, after the ears are in milk, than to cut and feed it to fattening swine. It costs much less to make pork in summer than in cold winter weather.—*American Agriculturist.*

**How to Handle Bees.**

A bee raiser in Ireland communicates to the *Farmers' Gazette* (Dublin) his experience in the management of bees, from which we extract as follows:

Some people get into a fury of excitement whenever they see a bee or hear its hum, though it be only intent on gathering a little honey from the nearest flower. They shout and wallop about them with hands or handkerchiefs, as if they were being attacked by an enemy. Such are just the people who generally get stung. Let the bee alone, even though it be buzzing close to your face. In all likelihood it is only animated by curiosity. Make a fuss about it, strike it, or get it entangled in your clothes or hair, and blame yourself if you feel its javelin. When engaged in collecting honey or pollen from the flowers, no amount of teasing will cause it to sting unless you hurt or entangle it. Even when a swarm fills the air you may safely walk about in the midst of it, only let your motions be slow and deliberate. Should they alight on your hands or face, never mind, they will soon fly again; they are only resting. In such a case go slowly aside, and give yourself a gentle shake or two, but refrain from brushing or beating at the bees. Avoid, however, standing in the line of the flight of bees going from or returning to their hives. At such times they have such an impetus that before they are aware of your presence they get entangled in your hair, and are apt to resent your obtrusiveness. So much for one's passive behavior. Let us now suppose ourselves engaged in necessary action. First let us learn these principles:

1. Bees never attack when their stomachs are filled with honey or other liquid sweet. This is their normal condition when swarming, and therefore they are then harmless, as also when returning laden to their hives.

2. Neither do they attack when thoroughly frightened. We frighten bees by blowing smoke among them, or by rapping rather violently on their hives.

3. When bees are alarmed in a hive by smoke or concussion, their first impulse is to fill their honey bags from their combs.

4. Bees in a hive that is constantly being rapped against will in a few minutes rush bodily out from among their combs into any empty skep or box set over them.

Suppose now we wish to get all the bees out of a common straw hive. We provide the needful empty skep and four wood or iron pins, six or seven inches long, a roll of burning rags, unless we possess a modern bellows, smoker, or tobacco pipe, and a stool or empty pail, on which to steady the hive while operating. We now approach the hive, blow three or four whiffs of smoke into the entrance to drive in any loiterers, gently raise the edge from the floor board, and repeat the smoking. Without the least jar, now lift the hive boldly up, and gently turn the mouth upward. If the bees show any sign of being ill-natured, give them a puff occasionally. Set the crown of the hive on to the stool or pail, and see that it is steady, and having the side where the bees are thickest raised an inch or two, now fix the empty skep over the other by sticking two of the pins into the lower hive, about an inch or two below the highest part of its edge, so as to support the edge of the empty skep. The other pins, sharpened at both ends, are placed as supports between the skeps. They will thus touch each other at one side, the other being open so as to give a full view.

Now commence rapping, gently at first, but gradually with more force, against the sides of the lower hive. In a few seconds the bees will commence to run as if for life to the upper hive. Among them may be seen the queen if a sharp lookout be kept. The great art here is in keeping the bees in one continuous, steady stream. Once they take a stand it is not so easy to dislodge them. Five to ten minutes should suffice to finish the operation if the room be warm. The driven bees may now be shaken about or tumbled from one hive to another without the slightest risk of stings.

If the weather be cold, or the operation be performed at a season when there is no unsealed honey in the hive, a little warm sirup should be sprinkled on the bees before commencing to drive.

In our modern hives we use less ceremony in dislodging the bees. After a whiff of smoke, we simply lift the frames of comb one at a time, give them a shake in front of the hive or skep we want to get the bees into, and in a minute whisk off the few that remain with a feather.

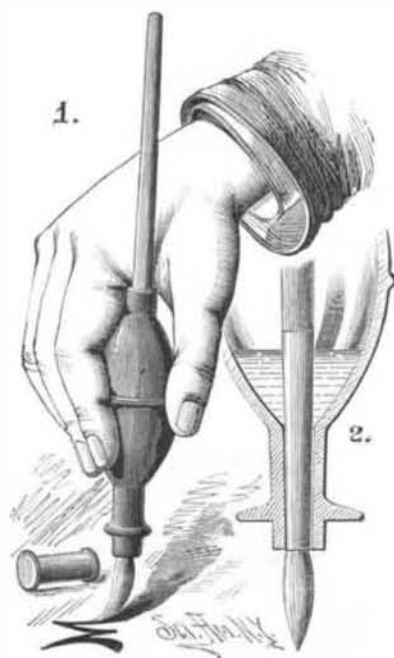
In getting bees into a hive we either pour them down in front of it, directing their course to its entrance with a feather, or shake them at once on the top of the frames, and cover instantly with a cloth.

To secure a swarm that has issued and clustered on a tree or bush, we advise, if possible, to cut the branch off after all are settled. If this be done gently, the bees can then be carried to the stand they are to occupy, laid down at the door of their new hive, and directed with a feather, as before; otherwise we hold an inverted skep below the cluster, give the branch one sharp rap, cover the skep, into which the bees will fall, with a cloth, and carry it to its future abode.

To make a simple examination of a colony in a bar frame hive, the quilt is removed, a puff or two of smoke given, and the frames are lifted one at a time, with as little jar as possible. Both sides can be examined, the queen seen and captured if desired, and the entire secrets of the hive discovered without hurting a bee or receiving a sting.

**FOUNTAIN ATTACHMENT FOR MARKING BRUSHES.**

A rubber bulb is provided with necks at opposite ends, through which the handle of a marking brush of the usual construction is passed. The lower end of the brush handle is flush with the end of the lower neck, which has a vent extending from its lower end up into the bulb. The lower neck is flanged so as to keep the brush proper away from a table or surface upon which it may be laid. A cap is passed over the lower end when the brush is not in use.

**FOUNTAIN ATTACHMENT FOR MARKING BRUSHES.**

To fill the fountain bulb, its sides are pressed together, the air being thereby expelled, and its lower end dipped into the ink. When the pressure is removed, the bulb expands and the ink is drawn into it through the vent. A slight pressure on the bulb forces a small quantity of ink through the vent to the brush. Fig. 2 plainly shows the construction. The attachment can be applied to any brush of the common form, and can easily be taken from one and applied on another. The handle need not be changed in any way to adapt it to be used with the fountain bulb.

This invention has been patented by Mr. P. C. Forrester, of Leavenworth, Kansas.

**To Photograph Silverware,**

Says the *Brit. Jour. of Photo.*, is somewhat difficult, owing to the white or frosted parts impressing the sensitive film before the burnished portions, which in silver, under certain conditions, are practically black.

But if the burnished portions be dulled, much of the difficulty vanishes.

One method of dulling the surface is by dabbing the burnished or excessively bright parts lightly but evenly with a piece of common glazier's putty. This produces a dead surface which photographs remarkably well, and enables the most delicate designs to be clearly depicted.

After the photograph has been made the putty is easily removed by brushing it over with clean, dry whiting, or better still precipitated chalk.

If the putty itself is made of precipitated chalk, all chance of scratching the surface of the silver will be avoided. A little of the chalk mixed with almost any kind of oil will answer.

Another method is to dull the surface with moisture by causing a dew to form upon the surface of the silver in the following manner:

After the image is focused and the plate is ready for exposure, a piece of ice is placed inside the vessel. The metal being a good conductor of heat soon becomes very cold, and moisture of the atmosphere quickly condenses upon it in the form of dew, and so dulls the surface.

When this occurs the exposure must be made immediately, before the formation of tear drops.

A long exposure should be made, and the development restrained, in order that the detail in the darker portions may be fully brought out. Some skill is required in arranging a set of silver pieces as to light and shade, so that each may be brought out in good relief.

**Electric Girls.**

The introduction of illuminated ballet girls has greatly added to the attractions of the spectacular stage. Girls with electric lights on their foreheads and batteries concealed in the recesses of their clothing first made their appearance a year ago, but as yet the use of illuminated girls has not spread beyond the stage. There is, however, a great future awaiting the grand idea of incandescent girls, and there is reason to believe that in a very short time private houses will be lighted by girls instead of stationary electric lights.

The formation of the Electric Girl Lighting Company is an event second in importance only to the invention of electric lights. This company proposes to supply girls of fifty candle power each in quantities to suit householders. The girls are to be fed and clothed by the company, and customers will, of course, be permitted to select at the company's warehouse whatever style of girl may please their fancy.

A very beautiful design for a front hall girl is now on exhibition at the company's office, No. 409 Gold Street. The present system of lighting the front hall of a dwelling house has the disadvantage that the light—whether it be a gas light or an electric light—must be kept burning all the evening, and that a servant must be employed to answer the bell. Thus there is a double expense—the cost of the light and the cost of the servant. The Electric Girl Lighting Company will furnish a beautiful girl of fifty or a hundred candle power, who will be on duty from dusk till midnight—or as much later as may be desired. This girl will remain seated in the hall until some one rings the front door bell. She will then turn on her electric light, open the door, admit the visitor, and light him into the reception room. One girl thus performs the duties of lighting the front hall and answering the bell, and her annual cost is much less than that of a servant and a gas light. If, however, any householder should desire to keep the electric girl constantly burning and to employ another servant to answer the bell, there can be no doubt that the electric girl, posing in a picturesque attitude, will add much to the decoration of the house.

Under the present system electric lamps or gas burners are fixtures, and cannot be moved from place to place. The electric girls, on the contrary, are movable. One girl can be made to give as much light as a large sized drawing room chandelier, and she can be moved from one room to another, leading the way to supper, for example, and placed wherever she can do the most good. There can be no comparison between a beautifully designed and chastely executed electric girl and a massive chandelier that constantly threatens to fall on somebody's head; and every householder of æsthetic instincts will be glad to exchange his chandeliers for girls.

An inexpensive electric girl of one or two candle power will be of great use when a person desires to go from one room to another in a dark house. Instead of having to carry a candle in his hand and incur the risk of dropping it or of having it blown out by a draught of air, the happy possessor of an electric girl can turn her on and send her before him to light the way. The student who is now troubled by the flicker of his gas light, or his inability to move the electric light from one part of his desk to another, can be made perfectly happy by an electric girl with a ground glass shade, who will take any position that the student may desire in order to throw light on his book or paper. No one who becomes accustomed to such a girl will think of returning to old fashioned methods of lighting.

The new company propose to furnish the new light at a little less than the charge made by the Edison and Brush Companies, and promise that in a short time their light will be decidedly cheaper than gas. Their plant already comprises 2,500 girls, and both electric boys and footmen will be at the command of the public as soon as certain experiments as to the possibility of enabling electric boys to give a steady light are completed.—*N. Y. Times.*

**A Watch Made to be Pounded.**

When a visitor to the office of the American Bank Note Company sat down to talk to Mr. Lee, that gentleman put a piece of white paper under a stamp, pounded on it, and laid the paper aside. When the visitor arose to go away, Mr. Lee put the paper under the stamp again, and pounded it once more. "You talked eight minutes," said he; "that wasn't bad." He showed the piece of paper to the caller, who saw upon it two printed clock dials. One showed the hands at four minutes to 4 o'clock, the other showed them at four minutes past 4 o'clock. "We keep that stamp," he said, "so that you sha'n't go away and say you came here at 11 o'clock in the morning, or that you had to wait an hour and a half, or make any other misstatements which can be guarded against."

"No," he added a moment later; "that stamp is the latest wrinkle in office furniture. It is an ordinary stamp with a clock attachment. The hour hand is simply a raised point upon a movable circle. The minute hand is an arrow on another revolving circle. The usual inked tape passes over these indicators and the outer circle of hour figures. Beside the clock face is a cylinder with several faces, each bearing a word—one is 'approved,' another is 'wired,' another is 'answered,' others are 'delivered,' 'Lee,' 'received.' Thus a business man is able whenever he sends away a letter, telegram, or package, receives an order, or transacts any business whatever, to record the precise moment at which the thing was done. It costs \$20. I did not invent it. I bought it."—*N. Y. Sun.*