They Only Knew Agassiz.

In 1858 a party consisting of Lowell, Emerson, Agassiz, Judge Hoar, W. J. Stillman and several others spent a few weeks of the summer in the Adirondacks.

The journey of the company gave rise to an incident which has often been incorrectly told, and which, as a curious comment upon human fame, deserves to be told again. The coming of the party was of course made known along the track it would follow, and at Keeseville, where the common roads then ended, the town was agog to see the "philosophers," as they were at once collectively called. But neither Emerson nor Lowell was known, Agassiz being the only celebrity to that world, owing to his having recently refused the offer by the emperor of France of the keepership of the Jardin des Plantes at Paris and a senatorship with a large salary, he preferring to devote himself to science and America.

The selectmen of the town waited on the visitors early in the morning after their arrival to pay their respects, they said, but really to see a man who had no regard for money and distinction. They were received formally, the spokesman bringing a copy of a periodical which contained a portrait of Agassiz, which he produced and carefully compared with the lineaments of the professor until he had satisfied himself of the authenticity of the individual, when he addressed his followers with, "Yes, it's him!" And they then proceeded to shake hands with him, the rest of the party being ignored.—W. J. Stillman in Century.

How Did the Dollar Mark Originate?

Below I give five theories of the origin of the dollar mark ($), they being selected from about 20 seemingly plausible solutions:

That it is a combination of the "U.S.," the initials of United States.

That it is a modification of the figure 8, the dollar being formerly called a "piece of eight."

That it is derived from a representation of the Pillars of Hercules, consisting of two needlelike towers or pillars connected with a scroll. The old Spanish coins marked with the pillar device were frequently referred to as "pillar dollars."

That it is a combination of "H. S.," the ancient Roman mark of money unit.

That it is a combination of P. and S. from peso duro, signifying "hard dollar." In Spanish accounts peso is contracted by writing the S. over the P., and placing it over the sum.

According to one writer the symbol of the dollar is a monogram of the letters "Y" "S" and "J," the dollar being originally a "thaler" coined in the valley of Sant Joachim, Bohemia, and known as "Joachim thaler," and the monogram the initials of the words, "Valley Sant Joachim."—St. Louis Republic.

Art Instruction.

An artist had sold a picture for an exorbitant price and the purchaser sued to recover. The attorney for the purchaser was making the artist uncomfortable by his questions.

"Now, sir," he said in that pleasant, ingratiating manner of lawyers with a witness, "do you think anybody could see beauty in that picture?"

"Some persons certainly could," replied the artist.

"You think the initiated in technical matters might have no difficulty in understanding your work?"

"I am sure they would not."

"Do you think you could make me see any beauty in that picture?" this most superciliously.

"Probably not now, sir"—and the artist was most humble—"but once I could have done so easily."

"Now, sir, how is that? I don't understand you. Explain, if you please."

"That's quite easy, sir. I could have done it simply by employing you as my counsel in this case."—Detroit Free Press.

Courtesy Among the Swedes.

The Swedes are a quiet, taciturn people. There is no jostling even among the lowest classes. When a train leaves a platform or a steamboat a pier, the lookers on lift their hats to the departing passengers and bow to them, a compliment which is returned by the passengers. You are expected to lift your hat to the shabbiest person you meet in the street, and to enter a shop, office or bank with the hat on is considered a bad breach of good manners. In retiring from a restaurant you are expected to bow to the occupants. Bowing and hat lifting is so common that the people seem to move around more slowly than elsewhere, in order to observe the courtesy.—F. H. Stauffer in Kate Field's Washington.

The Dog Didn't Like His Snore.

In hunting for evidence of a dog fight Sunday the officers learned that one Herbert Sprague, a stevedore, had been bitten by a canine. Investigation shows that Sprague went to bed Saturday night with a bull pup. Sprague snored, and this disturbed the dog, so he scratched his owner's face to wake him. Sprague retaliated by cuffing the canine, whereupon the bull fastened his teeth in the man's nose and then shook him, sadly lacerating the member. Sprague finally broke the hold, disabled the dog with a chair and then got a neighbor to shoot him. The nose will recover, but looks bad.

PILGRIMAGES TO MECCA.

Religious Zeal of Mohammedans a Great Boon to Steamship Companies.

It is more than remarkable that a custom which arose shortly after the death some 1,260 years ago, of a man whose name was for centuries identified with all that was hostile to Christian dominion and opinion should within the last few years have had an important and favorable influence on the earnings of certain British lines of steamers.

No race has been more enthusiastic in the way of pilgrimage to the holy city of Arabia than that inhabiting the Malay peninsula and archipelago. Although their conversion to Islamism dates back only some 500 years, if indeed quite so long (the records of the event being decidedly vague and untrustworthy), the duty of performing the "Haj" is recognized by all right minded Malays as imperative. The peninsula itself probably furnishes a far fewer number of pilgrims than the large islands of the archipelago forming the magnificent territory known as Netherlands Indies. Java and Celebes, Boyan and Bugis, to say nothing of innumerable less known places, now send forth multitudes yearly to visit the sacred fane. It would not at first sight seem that the journey—made principally in well appointed steamers—involved any particular hardships.

But the usual conditions of the "pilgrim traffic" are somewhat different from those of ordinary passenger vessels. The Malay pilgrim, whose ticket to and from Mecca is provided by a passage broker, has to find his own provisions while on board. In all cases he has to pay smartly for conveyance from Jeddah to Mecca overland, unless he elects to do the journey on foot, but in any event he has to provide the necessary commissariat. The steamers as a rule are overcrowded for ordinary comfort, although permitted by regulation to carry the 500 or more pilgrims who embark. Should, as sometimes happens, an epidemic break out during the voyage, the death rate becomes tragical. The worst hardships, however, commence on landing at the evil smelling and by no means healthy port of Jeddah.

Few of the pilgrims provide themselves with adequate necessaries to tramp the greater portion of the 100 miles which separate the city of Mecca from its nearest port. Yet worse is their condition on returning. The price of food is exorbitant, and thousands perish annually of exhaustion and insufficient nourishment—and this despite the best efforts of the British and other consuls at Jeddah, who issue all needful warnings to the pilgrims. Quarantine, again, tells heavily against the would be Haji. A few extra days' detention exhausts his small stock of provisions, and he falls a ready victim to disease. The result is that a large proportion of those who visit Mecca never return to their own country. The trade, however, is profitable to steamer owners, much as it is disliked by captains and officers. As for Europeans unfortunate enough to be passengers in a pilgrim ship, they are not to be envied.—Pall Mall Gazette.

Character In Gait.

Gait is an important part of physical expression. By his gait a man tells as whether he is fresh or tired, strong or feeble, in good health or in bad. To some extent also gait denotes occupation. The upright and somewhat rigid walk of the soldier differs largely from the rather rolling gait of the sailor, and different from both of these is the slow, jolting gait of the country laborer, which, however, is partly accounted for by his clumsy and heavy boots. In the peculiarities of gait, again, an attentive eye discovers many moral qualities. Slow steps, whether long or short, suggest a gentle or reflective state of mind as the case may be while on the contrary quick steps seem to speak of agitation and energy.

Reflection is revealed in frequent pauses, and walking to and fro, backward and forward, the direction of the steps wavering and following every changing impulse of the mind, inevitably betrays uncertainty, hesitation and indecision. It might be asking too curious a knowledge to distinguish by their respective gaits the miser, the spendthrift and the philanthropist, but the proud man is almost always known by his step, the vain man to some extent and the obstinate man not a little.—Leisure Hour.

Living on a Beggarly $10,000.

No one who has not actually mixed with New York dandies knows how much they spend. A social philosopher has lately reckoned that a young man about town, who takes his part in the good things which are going, cannot dress under $2,500 a year. His tailor's bill will eat half of this, his shirts and "gentlemen's furnishings" a quarter, his boots not less than $225. It will cost over $500 to outfit him for yachting, tennis and polo. Then add to this his bill for horses, his club bill, his florist's bill, his restaurant bill, his lodging bill and the nameless sundries which constitute one-half of the outlay of a young man about town, and it will be seen that a man may have $10,000 a year and yet be familiar with the face of duns.

One of the oldest and wisest clubmen of the day recently, after an hour's study of the necessaries of life for a man of fashion, declared that he would advise no one to attempt the life with less than $25,000 a year.—Cor. San Francisco Argonaut.

A Breach of Etiquette.

In Holland a woman is a secondary consideration and a poor consideration at that. No Dutch gentleman when walking on the sidewalk will move out of his way for a lady. The latter turns out invariably, however muddy or dangerous the street. Ladies very rarely make any requests of the lords of creation. An American woman asked a Holland gentleman at a party to bring her a certain book from a table. The bewildered stare with which he favored her convinced her that she had committed a conventional offense. He brought the book, but quietly informed her that a Hollander would never have asked such a favor.—F. H. Stauffer in Kate Field's Washington.

Wild Bananas Have Seeds.

Wild varieties of bananas have been found in Ceylon, Cochin China and the Philippines. These of course have seeds, but they are inferior to the long cultivated varieties. The banana is cultivated by suckers, and it is in this way that the plant is perpetuated indefinitely.—Goldthwaite's Geographical Magazine.

Although something is known about the mind of birds and animals, there are few ascertained facts concerning that of insects and fishes. They rarely move in anything like a straight line, and it is hard to arrive at anything more than approximate results.

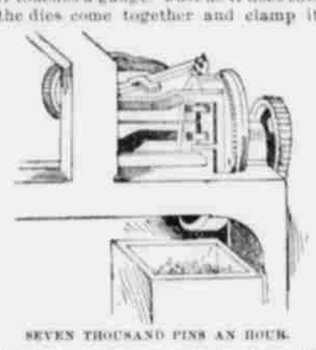
HOW PINS ARE MADE.

Cut, Pointed, Headed and Packed by Machinery.

Turned Out at an Astonishing Rate by Wonderfully Ingenious Mechanism—How They Get Their Rich Polish.

The machine that makes pins turns out 7,500 of these tiny essentials in an hour. Before the pin is finished it goes through very many operations, which are described in the Youth's Companion as follows: A reel of wire hangs over the machine, the free end of which passes between two rollers.

As the wire leaves the rollers it passes between two matched dies until it touches a gauge. Just as it does this the dies come together and clamp it



SEVEN THOUSAND PINS AN HOUR.

firmly in a groove in their face. At the same time the machine cuts it off the proper length.

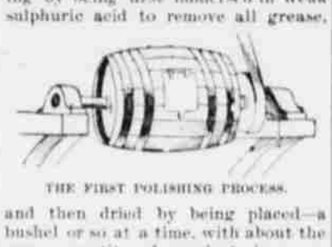
The gauge then moves away, and a little punch forms the head by striking the end which rested against the gauge.

When this is finished the dies separate and deliver the pin into one of the great many grooves in the face of the wheel about a foot in diameter, and just as wide across its face as the pin is long.

When the pin is taken by the wheel it has no point, but as the wheel turns it rubs the pins against an outside band, which causes each one to roll in its groove, and at the same time carries them past a set of rapidly moving files, which brush against the blunt ends and sharpen them roughly.

They next pass against the faces of two grinding wheels, which smooth the points, and then to a rapidly moving leather band having fine emery glued on its face. This gives them the final polish, and as they leave the band they are dropped into a box underneath the machine.

After this the pins are plated with tin to give them a bright, silvery appearance. They are prepared for plating by being first immersed in weak sulphuric acid to remove all grease,



THE FIRST POLISHING PROCESS.

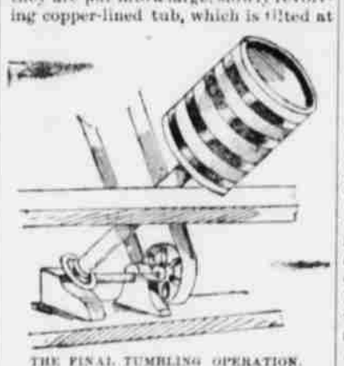
and then dried by being placed—a bushel or so at a time, with about the same quantity of sawdust—in a machine called a tumbling barrel.

This is simply a cask suspended on a shaft which passes through it lengthwise. Two or three hours' rolling in sawdust cleans the pins and wears away any little roughness which the machine may have caused.

Pins and sawdust are taken together from the barrel and allowed to fall in a steady stream through a blast of air.

After this they are spread out in trays having sheets of zinc in their bottoms, which have previously been connected with one of the wires of an electric battery. The trays are then placed in a tank containing a solution of tin in muriatic acid, and the other wire of the battery is inserted in the solution. Electrical action immediately begins and deposits metallic tin on the entire surface of each pin.

They are then washed in a tank of water and put into other tumbling barrels with hot sawdust. When they have been dried and cleaned of the sawdust, as in the former instance, they are put into a large, slowly revolving copper-lined tub, which is tilted at



THE FINAL TUMBLING OPERATION.

an angle of about forty-five degrees.

As this revolves the pins keep sliding down the smooth copper to the lower side. This constant rubbing against the tub and against each other polishes them.

It was the practice formerly to allow pins of all lengths to become mixed in the different operations, and, after polishing, to separate them by a very ingenious machine, but it has been found more economical to keep each size to itself.

From the polishing tub the pins are carried to the "sticker," where they fall from a hopper on an inclined plane in which are a number of slits. The pins catch in these slits and hanging by their heads, slide down the incline to the apparatus which inserts them in the paper.

As the number of pins in a row on the paper and the number of slits are the same, an entire row is stuck at once by an ingenious device, which takes one pin from each slit and inserts them all at once in the two ridges which have been crimped in the paper by a wheel that holds it in place to receive the pins.

Sleeping in Sections.

Sir James Crichton Brown, the expert on brain diseases, has asserted in a popular lecture that insomnia is not attended with such disastrous consequences as is commonly supposed. It is not as dangerous as the solicitude of the sufferer. He suggested that the brains of literary men, who are the most frequent victims, acquire the trick of the heart, which takes a doze a fraction of a second after each beat, and so manages to get six hours' rest in twenty-four. Some brains, in cases of insomnia, sleep in sections, different brain centers going off duty to take

ENTIRELY NEW MINERAL.

Crystals of "Carborundum" Created by an American Chemist.

Incidentally to an attempt to produce diamonds by artifice an American chemist has recently discovered a mineral hitherto unknown—the hardest substance in existence with one exception. It is called "carborundum."

The inventor for making his gems obtained from a concern in Lockport, N. Y., the use of its aluminum-smelting apparatus. In reducing that metal electricity is employed, generating an enormously high temperature. As a chance experiment he put into the furnace a lump of clay together with a piece of graphite, which is pure carbon. The result was some small wine-colored crystals of rhomboidal shape. On examination it was found that they were harder than sapphire. Diamond is the hardest of natural minerals; sapphire comes next, and then ruby.

Chemical analysis proved that the crystals were composed of carbon and silicon in a combination hitherto unheard of. It does not occur in nature. The process above described, repeated again and again, produced the wine-colored rhomboids every time. A company has been formed to manufacture them for polishing all sorts of things, even diamonds. They are crushed to powder like emery and made into wheels with a cementing compound. The demand for them is already greater than the supply. At the office of the geological survey this new grinding material is to be tried in the preparation of thin slices of stone for microscopical examination. These films of rock—granite, marble, or what not—are reduced to such thinness that one can read through them.

Mr. Kunz, the famous expert in gems, believes that "most of the precious stones will eventually be produced artificially. All of them are very simple in their composition—the diamond, for example, is pure carbon, and the ruby is almost pure alumina—and the problem is merely to make their elements crystallize properly. Chemists, who have hitherto confined their attention to taking things apart, are beginning to learn how to put them together again. The English professor, Maskelyne, manufactured diamonds in his laboratory several years ago, though they were too small to have commercial value. Emeralds have been produced accidentally at the pottery works of Sevres, France.

A NEAT EXPERIMENT.

How to Make a Hoop That Will Roll Up Hill.

Cut out a narrow strip of pasteboard and join the ends together to form a hoop. On the inner side of the hoop fasten a small weight, such as a metal button or a bit of sealing wax. Con-

struct an inclined plane by placing a flat ruler on a table, with one end resting on a slight elevation, such as a pile of books. Place the hoop on the incline in such a position that the weight may be slightly in front of the highest point of the hoop, in the direction of the top of the incline. On releasing the hoop it will be found to at once roll up the incline, in seeming defiance of the law of gravity. It will increase the mystery if instead of a hoop a round pasteboard box is used, having a similar weight on the inside.

THE HOTTEST SPOTS.

Death Valley in California Carries Off the Palm in America.

In the eastern hemisphere the hottest spot is on the borders of the Persian gulf on the southwestern coast of Persia. The thermometer during July and August never falls below 100 degrees during the night, while the temperature during the day rises to 128 or 129 degrees. Little or no rain falls, and yet, in spite of the terrific heat and other drawbacks, a comparatively numerous population contrive to live there, obtaining their water supply by divers from the copious springs of fresh water which burst forth from the bottom of the sea.

In the western hemisphere the hottest region is a valley in California (known as the Death valley), situated to the east of the Sierra Nevadas, and running between two mountain ranges, the Funeral or Tuneral (6,000 feet) and the Amargosa (10,000 feet), which has as high or even a higher mean temperature than the region on the Persian coast. In four months out of five during which readings of the thermometer were taken, the mean temperature rose above 90 degrees, while in July and August it exceeded 100 degrees. The mean temperature for the twenty-four hours on the 18th of July, 1891, was just over 108 degrees. This valley is uninhabited, and derived its significant name from the circumstance that an active party of California emigrants, who had strayed from the regular overland trail, perished there in 1850 from heat and thirst. The hottest region in Africa is in Nubian desert, where food may be cooked by being buried in the sand. The Arabs say of it: "The soil is like fire and the wind like a flame." The hottest portions of the British empire are India and Australia.

Work Done by the Heart.

I have always considered the heart the most perfect organ of the animal economy and one that never shirks its duty. Without one second's rest, night or day; often without the intermission of a single pulsation, at every beat it propels two ounces of blood through its structure. At seventy-five pulsations per minute nine pounds of blood is sucked in and pumped out; every hour, 540 pounds; every day, 12,960 pounds; every year, 4,730,400 pounds; every 100 years, 473,040,000 pounds. Verily a good organ!—Medical Brief.

Cows Need Rich Food Now.

Dairymen should feed corn and pumpkins freely now. They are far too carbonaceous to agree with the standard laid down by the German scientists, but they agree with the standard as fixed by the cows of America. As the weather grows colder cows need to fortify themselves against the cold, and they require an excess of carbonaceous foods to do it with. The standard rations apply to warm conditions. In getting ready for winter cows store up fat, and fat is a carbonaceous product. Feed corn—stalks and all—and pumpkins liberally.