residence in the State of Zulia, he has only met with one true specimen of lignite. This specimen was found near the Cordilleras and in the direction of the Rio Torondoy, and its quality greatly interested those who examined it. It was ultimately sent to Caracas to be thoroughly examined and tested. The northern basis of the Cordilleras is not much known, and Mr. Plumacher reports that he is not aware whether it contains any coal; but between Escuque and Bettijoque, in the town of Columbia, petroleum wells of an inferior quality are abundant. Reporting generally on the coals which have been so far discovered in this district, Mr. Plumacher states that the driest and most compact of all is that of Tule, and after the many trials to which he has submitted it, he is able to place it among the coals of the best quality, serviceable for all those purposes for which the best lignites are advantageously employed. We further note that, however great the riches manifest on the surface of this region may appear to be in the innumerable fountains and deposits of petroleum, bitumen, and asphalt, such riches cannot be compared with those contained in the immense coal deposits from which those substances proceed. This conviction, which is derived from the nature and circumstances connected with the inexhaustible fountains of petroleum, asphalt, bitumen, and coal already mentioned, supports the opinion that few countries possess the mineral wealth that abounds in the regions around the lake of Maracaibo; and the opinion is expressed that if these coal deposits, which really form the greatest wealth of the State, have not yet been discovered, it is owing to the fact that by far the greater part of its territory is at present in the wild and desert condition in which it was found at the conquest. The government has never interested itself in an exploration of the district, neither have individuals done so, although many may have possessed the means and the knowledge adequate to such an undertaking.

A Big Load of Cotton.

On Saturday, April 2, there arrived in New Orleans the Mississippi River steamer Henry Frank, with the largest cargo of cotton ever brought into the Crescent City—9,223 bales. Other freight brought this cargo up to an equivalent of over 10,000 bales. The Frank is a stern-wheel steamer of not unusual size, but specially designed for the transportation of baled cotton. Of this tremendous cargo, only 2,500 bales were stored in her hold, the balance being built up over the entire steamer, so that her appearance was that of a floating fortress. Only her smokestacks, escape pipes, pilot house, and wheel were visible. Here and there port holes were located to admit air to the furnaces, or ingress and egress to and from the cabin. The bales were tightly packed, fourteen tiers high, the joints being broken as in brickwork. A force of twenty men were constantly on the alert with appliances for quenching any fire that might break out. The cargo was insured for $400,000, and the average weight of each bale was 450 lb. The Henry Frank's cargo was picked up between Memphis and New Orleans, and its arrival safely at the latter city evoked great interest. When it is remembered that 4,000 bales of non-compressed and 6,000 bales of compressed cotton is considered a large cargo for an ocean-going steamer, the size of the Frank's load of the non-compressed article becomes more apparent. The freight would average $1.25 per bale, and the money advanced shippers by the boat on account on this trip was over $20,000.

A Cracked Volcano.

Within the space of ten months Mount Etna had five abundant eruptions of smoke and sand, without any subsequent flow of lava. In one instance, after profound subterranean rumblings and numerous earthquake shocks, there appeared on the eastern side of the mountain a great cloud of vapors and ashes, which escaped by a crevice nearly three miles long. The snows melted suddenly around the summit of the mountain, jets of hot vapor escaped at many places, and the small muddy craters of the western declivity became very active, as is usually the case on the approach of a great eruption. But to the surprise of all observers, within thirty-six hours afterward the volcano had returned to a state of perfect calm. Such a phenomenon has never before occurred within the memory of man. Vicenzo Tedeschi di Ercole attributes it to the existence of an immense opening, which appeared upon the mountain at the time of the eruption of May 26, 1879. He concludes that a very strong pressure is required for the formation of lava, and that a great tension of gas is indispensable in order to raise the lava to the surface of a mountain. It appears probable, therefore, that there will be no reason to fear any further eruption in the cone of Etna as long as the present crevice is open.—*Ann. de Chim. et de Phys.*

Diphtheria.

Dr. Gauthier, of St. Paul, Minn., tells in the Chicage *Medical Review* of his success in an epidemic of diphtheria by the use of iodine. He has treated 200 cases with but two deaths, while before adopting this method he lost one-third of all his cases. The treatment is as follows: The patient is ordered tincture iodine in ten to twelve drop doses every hour, well diluted with water, so long as the fever lasts, subsequently reducing to ten drops every two, and finally every three hours. Local applications are made use of at the same time. These latter should be made by the physician at least twice a day. For internal use the decolorized tincture is used. Bread and starchy articles of diet are used in abundance.

Trial of a Fire Nozzle.

A trial was lately had in Boston of the Monitor or Universal Nozzle, the patent of Andrew J. Morse. The nozzle is of the same pattern as that used upon the fire boat Flanders, and this exhibition was given to demonstrate its value for street service, whether operated by steam engines, or by a powerful pump in the basement of stores. The trial was given under the directions of District Engineer William H. Cunningham, of the third district, and a detail from Engine No. 25, under Captain George W. Frost. Mr. Morse, the inventor, was present, as well as District Engineer Regan and Chief Green, who expressed himself more than satisfied with the results attained. The nozzle, which was securely fastened to a heavy section of plank, was bolted to the pavement, and the power was furnished by the engine in the basement of the Mechanics' Exchange, on Hawley street. The pressure, each trial, was 160 pounds. The first trial was with a 1⅜ inch nozzle, through a single line of hose; the second with a 1½ inch nozzle and a single line of hose; the third with a 2 inch nozzle and three lines; and the last through a 1⅝ nozzle and two lines. The stream in each case was more than expected. Upon the level a tremendous volume of water was thrown for a distance of at least 250 feet, and when played in a vertical direction, the water was thrown completely over the five story buildings on Franklin street. The handling of the pipe was conducted by one man, who had not the slightest trouble in directing the torrents of water that came from the nozzle. It is the inventor's idea that for street service the nozzle should be mounted on a four-wheeled hose carriage, which could be separated at will, the rear wheels having the nozzle and the front wheels the hose.

Orchid Hunting along the Rio Negro.

In a recent letter to the *World*, written at the little settlement of Tauapassua, Rio Negro, Brazil, Mr. Ernest Morris corrects the statement made in a previous letter, that the prince of cattleyas, *C. El Dorado*, is a habitat of high forests. It is a native of the lowlands only, the error now corrected having arisen from his mistaking a schomburgkia for the cattleya. Cattleya El Dorado, he says, is found only on the Negro, but *C. superba* has an immense range, being found not only throughout the whole Rio Negro region, but up the Amazon as far as Teffe and at the mouth of the Japaru. There are several varieties of *C. El Dorado*. The most beautiful has sepals and petals of a clear rose, with lips of a most beautiful crimson and throat of deep orange. The flowers are large and delicately fragrant, and bloom in January or February. Among other orchids collected (and the first that I have seen) was a tall growing epidendrum (?) which produces its flowers from the top of the stem. Six specimens of this plant were found near Tauapassua, every one growing in an ants' nest.

Speaking of his collections, Mr. Morris says: "Besides the orchids I brought with me numerous twigs and branches which were covered with cauchy (a sediment deposited by the water, and very common in low forests), which has poisoned my hands and face. I propose to distribute among the orchid growers at home specimens of this cauchy. It should be found in every hothouse, and it would show the lover of orchids, did he but touch it, what a collector undergoes."

New Method of Packing Fish Eggs for Shipment.

Under the supervision of Professor Baird, U. S. Fish Commissioner, a shipment of 40,000 eggs of the whinnish, or land-locked salmon of Maine, was recently made to Germany, by Mr. Fredrick Mather, of this city. Half the eggs were consigned to the Berlin Fishery Association, and the rest to the Société d'Acclimatation, of Paris. Mr. Mather has recently adopted a mode of packing for shipment which differs materially in detail from that employed last year, in the course of which he shipped 700,000 eggs with a loss of only 7 to 8 per cent. It was the earlier practice to place the ova in shallow trays composed of a wooden frame with a bottom of canton flannel. The trays were placed one upon another in a vertical position in a compartment directly beneath an ice box, from which water a little above the freezing point and well charged with oxygen constantly percolated. In the new method the trays are put into tin boxes one upon the other until each box is full. A well fitting cover is then placed over them, and the boxes, thus nearly hermetically sealed, are packed in ice. There is no percolation of water upon the eggs in this mode of packing. But as the box detains and condenses all moisture arising from the trays, and the supply of air is sufficient for a number of days, it is believed that it will save a larger percentage of the eggs than was possible under the old method, besides occupying somewhat less space.

Climbing Trees for Fish Bait.

In his search for orchids in the forests along the Rio Negro, in Brazil, Mr. Ernest Morris was surprised to see his native rowers run his canoe ashore and proceed to climb a low tree covered with bromelias and large tillandsias. "Those are not orchids," he said. "No matter, patron," replied the Indian; "we want *iscal* (bait)." Wondering at this Mr. Morris watched the boy as, hand over hand, with knife held between his teeth, he passed from limb to limb. Soon a large tillandsia, several feet square, fell to the ground. "Where is your bait?" said he. "Look," said the Indian, who was cutting the leaves close at the base, where the explorer saw between the leaves a mass of worms resembling our common ground worm. How they got there puzzled him. The Indian said they climbed the tree, but this he doubted. At all events, there was bait. What a blessing it would be considered by the American small boy if, instead of digging up flower-beds or turning over old boards, thus losing much valuable time, he could fill his can of bait by climbing a tree? Mr. Morris adds that he has caught fish with the fruit of the tucuma (*Astrocaryum tucuma*), but this was the first time he ever found actual live bait in the trees.

RECENT DECISIONS RELATING TO PATENTS.

United States Circuit Court.—District of Maryland.

EMIGH *vs.* BALTIMORE AND OHIO RAILROAD COMPANY. STEVENS *vs.* SAME. STEVENS, USE OF EMIGH, *vs.* SAME.—PATENT RAILWAY BRAKE.

Bond and Morris, Judges:

1. The question in controversy is, "What saving did the defendant derive from the use of the Stevens brake for the period covered by that patent above what it would have derived from the like use of the Hodge brake during that period?"

2. The difficulties of proving the exact money value of this saving are exceptionally embarrassing.

3. Although this rate may possibly be less than the defendant's actual gain, in the absence of more exact means of computing what that gain was, the court determines upon twenty-five dollars per car per year as the proper rate of profits to be decreed to the complainants in all three of these cases.

4. On these sums the court does not allow interest.

United States Circuit Court.—District of Massachusetts.

ROOT *et al. vs.* LAMB.—SPIRAL TUBES.

Lowell, J.:

1. Where an invention relating to the method of forming spiral tubes was described in terms used in the art of making welded tubes, it not appearing that sheet metal tubes could be made in the manner described: *Held*, that the invention is thereby limited to the making of spiral welded tubes.

2. In describing his invention a patentee may misuse words, but in seeking his meaning the ordinary signification of the words he uses must have weight.

3. A patentee's invention cannot be given a broad construction, so as to cover later inventions, when it appears from the state of the art that there was no opportunity for a great original discovery and the claim is properly limited to the specific improvement.

Bill dismissed.

Mexican Pyramids.

On his return from his tour of antiquarian research in Southern Mexico, M. Charnay reported the discovery of a ruined Toltec city in Tabasco, near the Gulf coast, a city which covers a wide area and must have been in its day a place of considerable importance. The long forgotten town is surrounded and dotted over with small hills, and the builders had utilized these natural elevations by erecting thereon a number of temples, pyramids, and palaces, and had connected their sites by bridges. The largest of the pyramids is 500 feet in height and a second is fully 300. Nature had had more to do with these monuments than art, as the builders had merely shaped the hillocks into pyramidal form and afterward faced them with stone, and steps were also cut in the sides, paved with a mixture of cement and pebbles. From a careful study of the remains of this ancient city M. Charnay is inclined to believe that it was founded between 1150–1180, and that it was in a perfect state of preservation at the time that Cortez invaded Mexico. This opinion was strengthened by a conversation with two well-informed Spaniards whom the explorer encountered in San Juan Bautista, who declared that there were to be found in ancient Spanish records statements to the effect that this city was not destroyed until after the town of Vera Cruz was laid out. M. Charnay is satisfied from indications he observed that there are remains of at least two other Toltec cities further up in the adjacent mountains, but further investigation is postponed for the present.

The Moquis.

In the history of the aboriginal races of this country little is said regarding the Moquis, a branch of the Pueblos, living, where possibly they have lived for a thousand years, in a rocky stronghold in a sandy desert of Arizona. This people number about two thousand five hundred, and occupy six villages, with houses built of stone cemented with sand and clay. These villages, says Dr. Loew, of Wheeler's surveying expedition, are built on the tops of four sandstone mesas, which are separated from each other about eight miles. They occupy the entire width of the mesas, and, standing immediately before the houses, one may look vertically down a depth of three hundred feet. In many places the sides of the mesas are terraced, being used as sheep corrals. In appearance the Moquis come rather nearer to the Caucasian than the rest of his race. These Indians are well clad, and the females especially so. Indian corn is the principal food—the sheep are raised for their wool rather than for the table. From the wool a good blanket is made. The seed corn is planted about one and a half feet from the surface, at which depth sufficient moisture is found to develop and sustain the plant. The Moquis have neither church nor any other place of worship, and the Spanish Jesuits were unable to gain a foothold among them.

Engineers' Club, Philadelphia.

At a recent meeting Mr. C. W. Buchholz read an interesting paper, calling attention to the rapid increase, during late years, in the weight of the rolling stock of railroads, especially in the locomotive, in the concentration of enormous loads upon one pair of drivers. He described the effect of this heavy weight, when hurled at the rate of 60 miles per hour, or 88 feet per second, upon a light iron bridge. He urged the great necessity of employing competent engineers to design and build such bridges, and of holding them to a rigid responsibility. He doubted the efficiency of trussed bridges with parallel chords and pin connections for spans under 150 feet long, under the present condition of large railroads using modern locomotives and running at a high rate of speed. He suggested solid plate girders and riveted arched trusses as being stiffer and more permanent. In conclusion, he drew especial attention to the great care the modern locomotive imposes upon the engineer in designing the details of all bridges and in determining and proportioning their floor systems.

Notes on the sewerage of Memphis were read by Mr. Wm. Henry Baldwin, giving some personal experiences while engaged in the construction of the work, and also describing some experiments and observations recently made by Major Humphreys, engineer, in charge of the sewers, showing their present condition.

Some topographical features of Memphis were described, showing that, although situated on a bluff, it does not overlook the river, but its surface descends rapidly to a small stream of water in the interior, separating the business from the suburban and rural parts of the city. To avoid polluting this stream, intercepting sewers were placed on each side. Their location, through private property for much of their length, was described, showing how, by avoiding all angles and using curves of 100 feet or more radius, these mains were reduced, practically, to straight lines.

The Memphis sewers being intended to carry off only household waste, the adjustment of their size was shown to be so proportioned that the nearly uniform supply of water afforded a sufficient midday flow to fill the sewers at least half full every day, thus keeping them constantly flushed. Hence the necessity for the entire, and not the partial, exclusion of rain water; for its admission, even from the roofs of dwellings, would render this adjustment of size, and hence the daily flushing of the sewers impossible.

The entire system is thus shown to be self-cleaning, except the upper end of the smaller branches where the water furnished by houses is not sufficient to half fill a six inch pipe, and here the flush tank is required to discharge once a day water enough for this purpose. The operation of flushing being required only at the dead ends, it will be seen that the tanks are widely distant from each other, that their action is entirely independent, and that the failure of any of them to operate would cause only local inconvenience, and have no possible influence on the rest of the system.

The fact that the pipes are entirely clear has been established by passing through them metallic balls but little smaller than the sewers themselves. The velocity of flow in the mains, as determined by recent gaugings, was shown to be such that any substance introduced into any part of the system would be discharged into the sewer in the course of two or three hours, in fact, long before it would have time to stagnate or become foul; and this, together with the complete system of ventilation described, by which a burning piece of paper is drawn into the sewer and not blown out, shows the complete success of the Memphis system of sewerage as a sanitary work.

Mr. Chas. G. Darrach read extracts from the reports of the chemical experts on the present condition of the water supplied to the citizens of Baltimore. This water is supplied from Lake Roland, and when drawn from the taps has such a disagreeable taste and odor as to be useless for domestic purposes. One of the experts found that there was present a volatile nitrogenous substance unknown to chemistry, which he believes to have been the cause of the offensive smell and taste. Whether this organic substance is injurious to health or not he is unable to say, that being a question for physicians. The other expert thought that, as the water was taken from near the bottom of the reservoir (some 25 or 30 feet below the surface), the water needed air. Mr. Darrach advanced the same theory, and in proof stated that the surface water of Tumbling Run Dam in Schuylkill Co., when visited in 1875, was good, while that drawn from the bottom was very offensive to both taste and smell. The water taken from the Fairmount pool during winter, when the ice remains for any unusual length of time, becomes very disagreeable.

Disinfection of Ships.

In devising a system for the thorough disinfection of vessels on board of which cases of smallpox had occurred, the Austrian Government, through its medical experts, resorted to the following method: Sulphur to the extent of twelve grains per cubic meter of the space to be disinfected was first burned in an earthenware vessel or basin, placed in the center of a mass of sand to prevent all risk of fire; every article of clothing, all the linen, etc., were hung across the cabin, the latter being then hermetically closed for three hours, and afterward exposed to the strongest possible draughts of air for twelve hours; finally, the walls, floor, ceiling, etc., were washed with one kilogramme of lime, or one-half a kilogramme of chloride of zinc, to every hundred liters of water.

Prospects of Aerial Navigation.

An interesting and suggestive paper by Dr. Bell Pettigrew F.R.S., was lately read at a meeting of the Balloon Society of Great Britain in the Royal Aquarium. Mr. W. H. Le Fevre, C.E., president of the society, took the chair. Reviewing the principal structural differences of the bodies and limbs by which animals were fitted to move on land, through water, or in air, Dr. Pettigrew pointed out that the analogy which obtained between water and the air as supporting media had strangely and gravely complicated the problem of flight, the idea uppermost in most minds being that a flying creature must float upon the air as a ship floats upon the water. It was this idea that led to the discovery of the balloon, though the balloon could not in any sense at present be regarded as a flying machine. Until endowed with the means of moving from one place to another independently of the wind, as he hoped it would soon be by the ingenuity of a member of the society, a gallant officer, whose plan had not yet been made public, the balloon would remain merely a lifting apparatus. The balloon was inefficient because of its levity; the flying creature was efficient because of its weight. The manner in which wings produced what was practically a solid basis of support in the thin air raised the whole subject of flight.

After describing minutely the structure and action of natural wings, he said, with regard to the speed at which they were driven, that the common housefly moved its wings 330 times per second, or 19,800 times per minute, the butterfly managing only 9 movements per second, or 540 per minute. That the wing was driven more slowly in proportion to its length had been proved by experiment, and this fact was hopeful for the future of flying machines, as there could be no doubt that comparatively slow movements would suffice for driving the long powerful wings required to elevate and propel flying machines. It was evident from what was seen in nature that flight was to a large extent a question of weight and power of body and size and speed of wing. It was satisfactory to find that a solution of the difficult and important problem of artificial flight was being attempted by men of the highest scientific attainments, and that aeronautical societies had of late years been established in France, Austria, and this and other countries. Classifying the various machines by which aerial locomotion had been attempted, he pointed out the causes of failure and the means by which partial success had in some cases been obtained. One of the main difficulties in the way of constructors of machines for aerial transit was the want of a sufficiently powerful and light motor, and in the use of compressed air for this purpose he saw a probable means of doing without the heavy steam or electric engine. Aerial navigation might well appear Utopian to the mass of mankind. It was not, however, on that account impossible. It was a question of time, perseverance, and ingenuity, simply a very complex physical problem, and the *data* for its solution were being slowly but surely accumulated.

Pasteur's New Disease.

In the *Lancet* for February 5, we called attention to the remarkable effects which M. Pasteur had obtained by inoculating rabbits and guinea pigs with the saliva of a child which had died from hydrophobia. The animals, it will be remembered, died thirty-six hours after inoculation, and in their blood was found a bacterial organism, which was quite peculiar, which could be cultivated, and then produced, when inoculated into other animals, symptoms identical with those observed in the others. M. Pasteur did not assert that this was the special microbic organism of rabies, but he considered that his experiments and the microscopical characters of the organism warranted the assertion that the disease was not septicæmia, but a malady altogether new to experimental pathology. In order to ascertain whether a similar affection can be produced by the inoculation of the saliva of persons who have died from other common diseases, M. Pasteur has made some inoculations with such saliva, but without any results. But since the case of hydrophobia was in a child, M. Pasteur applied to M. Parrot for some saliva from children dying from diseases which are regarded as non-specific, and received some from the bodies of three children who had died the preceding day from broncho-pneumonia. In rabbits inoculated with this saliva there was found precisely the same organism as had been discovered in those which had been inoculated with the saliva from the case of hydrophobia. He thinks it certain, therefore, that this organism may often be found, and that it is one of those which have their habitat in the commencement of the alimentary tract. Hence, as he points out, it is not in any way connected with rabies, but it is a surprising fact there should exist in the saliva, at least of children, a special organism which is capable of causing so rapidly the death of rabbits and dogs, even when inoculated in very small doses. It is a fact of very great importance in the etiology of diseases which may be ascribed to microscopic organisms.—*Lancet.*

The Treatment of Tetanus.

Dr. Ria believes that tetanus consists essentially of an exaggerated reflex irritability of the spinal cord, which may be indifferently caused by traumatisms, toxic influences, or so called rheumatic action. Since the motor tracts of the cord respond in a morbidly exaggerated manner to all sensitive impressions, the main object of treatment will have to be to lessen sensory excitation; for, if this be accomplished, the cord will gain rest, and thus a return to its normal condition will be made possible. Ria, therefore, emphasizes strict isolation of the patients. They are to be separated from their friends, and to be kept from all possibility of sensory impressions. Even the physician or attendant should exercise great care in his intercourse with the patient, lest the latter be disturbed.

Four cases have been successfully treated by the author. In addition to complete and prolonged isolation, several drugs were employed. Thus, in the first case, in which tetanus developed after an amputation of the thigh, chloroform was applied externally by the use of the atomizer. Nearly three ounces were used daily. A gentle sleep was also maintained by the exhibition of chloral hydrate and morphine. The cure was complete in two weeks. In the second case, that of a youth twenty years old, the same plan of treatment was adopted. But one-sixtieth of a grain of atropine was given in conjunction with the chloral hydrate. A cure took place in twenty days. In the third and fourth cases the external use of chloroform was not enforced, and the last case was treated by bromide of potassium and isolation. This one recovered after forty days.—*Medic.-chir. Rundschau, January*, 1881.

Strength of Bronzes.

In a paper lately read before the American Society of Civil Engineers, Professor R. H. Thurston describes a new bronze alloy of maximum strength. The properties of this alloy were ascertained by Professor Thurston in the course of his examination in the mechanical laboratory of the Stevens Institute of Technology of a series of 36 alloys of copper, tin, and zinc, in which the proportions of the copper were varied from 10 to 80 per cent; of the tin, from 10 to 80 per cent; and of the zinc, from 10 to 70 per cent. The results of these experiments pointed to an alloy of the proportions of copper, 55, zinc, 43, and tin, 2, as likely to be that possessing maximum strength, and on Professor Thurston making the alloy he found it to possess a good color, to be close grained, and susceptible of high polish. It was also found to have immense strength, considerable hardness, and moderate ductility, while it could also be forged if carefully heated. For purposes demanding toughness as well as strength, Professor Thurston found, however, an alloy with less tin to be preferable, and he gives the proportions of copper, 55, tin, 0·5, and zinc, 44·5, as affording the best results. This alloy, he states, has a tensile strength of 68,900 lb. per square inch of original area, and 92,136 lb. per square inch of fractured area, while it elongated from 47 to 51 per cent (length of test sample not stated), and reduced to 0·69 to 0·71 of its original diameter before fracture. He also states that the shavings produced by the action of the turning tool on this alloy curled closely, and were tough and strong like those of good iron. Professor Thurston also refers to an alloy discovered several years ago by Mr. J. A. Tobin, but which appears not to be generally known. This alloy, which consists of copper, 58·22, tin, 2·3, and zinc, 39·48, had, when cast, a tensile strength of 66,500 lb. per square inch of original section, while when rolled hot its tenacity rose to 79,000 lb. per square inch, and when moderately and carefully rolled cold, to 104,000 lb. per square inch. It could also be bent double either hot or cold, and was found to make excellent bolts and nuts, while it could be forged at a low red heat.

Fight with a Porpoise.

Mr. R. R. Tanguey, the veteran Rochester sportsman, recently had a fight with a porpoise. In a letter from St. John's River, Florida, he says:

"I will write you of my last struggle with a large porpoise. I was rowing up in what we call the 'witch-tide,' when this monster came running between me and the bluff. I struck him on the head with my oar. He gave a sudden dart and went ashore like Jersey lightning, and I went almost as quickly after him. Then he rushed for the deep water again, but chanced to open his huge mouth. This was my chance, and I rammed the ore in his mouth and down his throat. Then came a tussle—he pulled and I pried. After a long struggle he quieted down; I ran for the boat and got my largest sword. With it I gave him a gash in the throat which made him wild with pain. After a while I got a chance to make him fast to the boat with a line around his tail. A man came to my assistance and we pounded him with clubs until he was dead. We waited for the next tide, as it was hard work to tow a dead porpoise. He doesn't float when dead. By hard work we got him ashore and to camp. Then we measured him. He was nine feet ten inches long, two feet three inches in diameter, and would probably have weighed more than six hundred pounds."

Foreign Bodies in the Eye.

Dr. Thos. R. Pooley (*Archives Ophthalmology*) reports some interesting experiments with the magnetic needle for detecting foreign substances in the eye. He concludes: 1. The presence of a steel or foreign body in the eye, when of considerable size, and situated near the surface, may be determined by testing for it with a suspended magnet. 2. The presence and position of such a body may most surely be made out by rendering it a magnet by induction, and then testing for it by a suspended magnet. 3. The probable depth of the inclosed foreign body may be inferred by the intensity of the action of the needle near the surface. 4. Any change from the primary position of the foreign body may be ascertained by carefully noting the changes indicated by the deflection of the needle.