

SCIENCE

A WEEKLY NEWSPAPER OF ALL THE ARTS AND SCIENCES.

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METEORITES!

We have JUST ISSUED AN ILLUSTRATED DESCRIPTIVE CATALOGUE OF OUR METEORITES, giving first a chronological list of the falls (descriptive of each individual specimen), under the three classes, SIDERITES, SIDEROLITES AND AEROLITES, followed by a LIST OF MICRO-SECTIONS OF AEROLITES FOR SALE, and a chronological list of the CASTS OF METEORITES which were made before cutting the specimens into slices, thus being an exact *fac simile* of the size and shape of the meteor.

These lists are followed by 25 PAGES OF ILLUSTRATED DESCRIPTIONS of some of the more recent masses that have passed through our hands.

The Index to this Catalogue not only gives IN HEAVY TYPE the names adopted for the Meteorites, but various important synonymous names in smaller type.

PRICE OF THE CATALOGUE, 25 CENTS.

If you have METEORITES for sale, or METEORITES that you desire sliced, write to us.

As in years gone by, we are still the headquarters in this country for MINERALS, ROCKS, FOSSILS, CASTS OF FOSSILS, and other Natural History Specimens.

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SCIENCE

TENTH YEAR.

The use of *Science* by scientific men has increased in the past few months as never before. More than two hundred of the leading scientific men and women of America have agreed to contribute to the paper during the coming year; and, as others are constantly joining in this move, to make the paper more valuable than ever, it cannot be long before there will be a body of five hundred competent users of this weekly medium of scientific discussion. It is our aim to place the paper in the hands of all competent persons who will avail themselves of this opportunity to make *Science* a better representative of American scientific work than ever in the past.

N. D. C. HODGES, 874 Broadway, New York.

SCIENCE

NEW YORK, JANUARY 29, 1892.

THE AMERICAN ASSOCIATION OF INVENTORS AND MANUFACTURERS.

Few occurrences of public interest have recently taken place which have been of greater moment to the people and to the nation as a whole, and few have attracted less public attention than that which was held in Washington in answer to the call of Mr. Watkins, on the 19th of January,—the meeting of the American Association of Inventors and Manufacturers. Organized a year ago, nearly, and composed of inventors like Dr. Gatling, Mr. Charles F. Brush, E. E. Sickles; business men like Mr. Gardiner G. Hubbard and Oberlin Smith; public men like General Butterworth and O. T. Mason; and scientific men like Professors Anthony and Thurston, and backed by the Commissioner of Patents, this association should have some interest for the people at large and for the journalists who represent the people. Its first meeting was opened by the president and attended by the whole bench of the Supreme Court, and its addresses during its several days' sessions were given by the most distinguished men of science and greatest inventors of the country.

The purposes of this organization are declared to be: To promote the progress of science and useful arts (Constitution U. S., i., 8). The diffusion of practical, scientific, and legal information respecting inventions. The encouragement of favorable and the discouragement of unfavorable laws respecting property in patents. To secure the co-operation of foreign inventors for reciprocal regulations under patent systems. The proper, just, and adequate protection of the rights of American inventors authorized by the Constitution of the United States. Any person in sympathy with the objects of the association is eligible to membership under conditions stated in the constitution upon the payment of a membership fee of five dollars for the first year. No initiation fee is charged. To the executive council, composed of the seven officers and the nine directors of the association, has been assigned the duty of completing the organization, begun with so much earnestness at Washington.

Its first meeting was held on the centennial of the signing by George Washington of the first patent law of the United States, the beginning of national industrial prosperity. As is well said in the call lately issued for the second meeting:—

“The celebration of the beginning of the second century of our American patent system was the outgrowth of a spontaneous desire to recognize publicly the benefits which that system has conferred upon our nation and upon the world.

“Eminent inventors, statesmen, and scholars from all parts of the Union met together to express their appreciation of the merits of that system, which has lightened the toil of the farmer, shortened the working hours of the mechanic, added to the safety of the miner, and lifted the burden from the household drudge.

“The monument then erected on the boundary line between two centuries, embellished by the best thoughts of

such gifted minds, will endure so long as the libraries of the world shall preserve the record of their tribute to American genius.

“While existing laws have encouraged and do now stimulate the creation of intellectual property and do throw safeguards around its ownership, yet the fact remains that neither the real inventor nor the author has been adequately protected in his rights.

“This state of affairs has resulted from the fact that the inventors of the country have never thoroughly organized themselves for mutual protection nor brought concerted effort to bear upon their representatives in Congress, to the end that proper laws should be enacted, nor have they heartily supported the officials of the Government in their attempts to secure adequate facilities for carrying out present regulations. Hence the system, even as it exists, has been preserved with great effort, and even now is handicapped by some conditions that are not encouraging.

“It may be true that the patent system, in a few instances, has had an unfavorable effect upon certain sections of the country and upon some occupations, and that some owners of useful patents have demanded greater profit for their inventions than was consistent with the public good. But such evils, if they exist, can best be remedied by intelligent discussion among those who have a vital interest in the things themselves.

“The people at large and their representatives need to be impressed with the fact that it is to the epoch-making inventions of the century that our country owes its high position among the civilized nations of the world.”

The patent system so auspiciously inaugurated by the greatest and first of our presidents has been intermittently promoted and sometimes obstructed in its operation by that alternation in power of friends and enemies—or lukewarm friends—which so generally characterizes the action of a popular government, and that of the United States no less than those of minor countries. In its best estate, however, it has never done the best that it might for either the inventor or the nation. During the last few years, its operation has been shamefully embarrassed and the interests of the country have been greatly injured, while those of the inventor and his rightful claims upon the country have been no less seriously affected, in consequence of the utter neglect of this great department by Congress, and the refusal of the national legislature to provide it with respectable quarters and sufficient working force.

In many cases, applications of immense importance to the industrial interests of the nation have been kept in the office for many months, through the utter inability of the working force to keep itself up with the business of the office.

The annual report of the Commissioner of Patents to Congress dated Jan. 1, 1891, calls attention to the lack of sufficient examining force and to the need of more office room. The commissioner remarks that “the pace kept up in the patent office now, as in all recent years, is inconsistent with that high degree of care which the patent system calls for,” and that “a patent should evidence such painstaking in examination that upon its face it should warrant a preliminary

of the thorax and abdomen, so as to assist the tidal movement of air outwards and inwards.

I may add that one of Chun's figures (copied in the paper in *Am. Nat.*) correctly represents the spirals of *Eristalis*, giving even the external slits, highly magnified; but he misinterprets the slits, and takes them to be longitudinal ridges on what he supposes are solid threads. I have also pleasure in learning that my young friend, Professor H. T. Fernald of Pennsylvania Agricultural College, after reading my paper in 1884, stained and cut fine sections of *Passulus cornutus* and thus shows the spirals to be a set of hollow grooves enclosing some of the stained hypodermis which secretes and surrounds the tracheæ.

Princeton College, Jan. 21.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

A Lightning Stroke.

ON the 30th of May, 1881, a party of ladies and gentlemen went in an omnibus from Washington to the country seat of a friend (H. C. Metzertott's), distant nine miles, in Prince George's County, Md.

During the afternoon the party was seated on the spacious veranda of the dwelling, the horses and omnibus standing on the lawn immediately to the front.

Suddenly a few clouds gathered, and, before any rain fell, a severe and sudden clap of thunder startled them. At the same instant a flash or streak of lightning descended and ripped apart the south-west corner of the roof of the frame carriage house standing alone about two hundred feet distant, descended down the sheathing to midway of the west, or end, wall of the carriage house, then at right angles apparently to the centre of the wall where the clap-boarding was ripped and shattered; then struck a brass-tipped pair of shafts standing near the north-west angle, shattering the right-hand shaft about midway, where a strip of iron covered with leather was placed to serve as a stay for the breeching strap; then apparently passed down and out at the floor by the closed door of the carriage house, where it was plainly seen by all the company moving along rapidly in small coils or circles up the road leading to the veranda, to the hoofs of the horses, playing around them with great velocity, and then apparently dissipated, no one could tell where. The horses were greatly agitated, fairly trembled, but did not move; and most of the company on the porch experienced a tingling, stinging sensation, but none were stunned. The sky soon cleared. J. H.

Washington, D.C., Jan. 23.

Traumatic Hypnotism.

THE case recently stated of a lady thrown into a hypnotic condition by being thrown from a carriage, in which condition she said and did certain things of which the next day she was entirely unconscious, brings to mind a fact that occurred near this place. Two lads of fourteen and sixteen went out to feed the stock. Coming near a young, almost unbroken colt, they leaped on his back. The animal started in a wild run for the barn, and dashing in at a low door struck the two lads violently against the beam that formed the top of the door. The door being very low the blow was not on the heads but the chests of the boys, sweeping them from the colt's back to the frozen ground. The elder lad sat behind his brother, and was thrown heavily to the ground, striking the back of his head, his brother falling upon him. Both lads rose; the elder rubbed his head, looked about, went into the barn and completed his evening tasks in an orderly manner, replying to his brother when addressed. They went to the house, and the lad warmed himself by the stove, went to the table, ate a

lighter supper than usual, and replied intelligently when spoken to; but his eyes were dull and had a dazed, half-conscious look. After supper he sat by the fire for some time, laughing aloud once or twice "at nothing"—than went to bed as usual. The next morning it was found that he knew nothing of any event after the instant of jumping on the colt's back, and seeing it dash off toward the barn. He had not felt the blow, nor been conscious of the fall, or of any subsequent words or acts, until he arose the next morning, but his conduct and appearance had been normal, except the causeless laughter and the dull look of the eyes. In the case of the lady flung from her carriage, she went into a druggist's, asked for water and a clothes-brush to renovate her dress, said she was not injured, needed no help, etc. Thus she said and did things suitable to the conditions of her accident. The lad, on the other hand, continued the course of action which he had begun before his fall, feeding the stock, etc. His acts during the evening were acts of habit, and such as he repeated every evening. Neither the lady nor the lad were dominated by any other mind, nor directed in their motions by any person conscious of, or responsible for, their state, but it seems that by reason of a blow given on the back of the head in each case, both the lady and the lad were in a true hypnotic state, and were subsequently entirely oblivious of all that had occurred while they were in that condition. JULIA MACNAIR WRIGHT.

Rain-Making by Faith.

SOME of the readers of *Science* doubtless may recall numerous memorable incidents of the administration of the genial, earnest, shrewd, and eccentric President Phinney of Oberlin. Apropos to recent articles on faith-healing and rain-making is a vivid recollection of such an incident.

Some forty years ago, on a cloudless Sabbath morning, the president walked briskly up the chapel,—there had been a distressing drouth,—and began the service with an extremely fervent prayer for rain. The prayer was long, and before it was finished the skies began to darken, and almost before the congregation was dismissed a copious rain began to fall. The suggestive fact in this relation is that President Phinney had been observed during the morning to give very watchful attention to the barometer.

H. CHANDLER.

Buffalo, Jan. 25

Some Curious Catnip Leaves.

As I passed by an old deserted log cabin, where the soil was poor and barren, I noticed a bunch of catnip in an angle of the pioneer zigzag fence. So close in the corner was it, that it seemed as if it had crept there for protection. But even in its apparent retreat it was conspicuous, for vegetation generally had succumbed to the frosts of early autumn. A society for the prevention of cruelty to plants ought to be organized, I thought, for here was this little stunted looking bunch of catnip, struggling for existence, when it certainly seemed physically unable to cope with the unfavorable conditions for growth surrounding it. Poor little lonely weed, I mused, is it just that you should struggle here alone against all the hardships which put even the best dowered plants to the test? and like my humane brothers who, in order to end the misery of a poor misused horse, feel compelled to take its life, I terminated its struggles by collecting it.

The catnip (*Nepeta cataria*) has a beautiful leaf, with a rather deeply crenate margin; its upper surface has a rich, soft, downy, rather velvet-like appearance, while the deep green color is a witness of its hardiness. But the leaves on this plant, which out of compassion I magnanimously collected, were very different from the normal type; the surface was nearly smooth, and the margin of many leaves was quite entire; others were crenate only near the base of the leaf, though entire toward the apex, as shown in the accompanying illustration. Why, and wherefore, this difference in the leaves? I queried. Why have they varied from the shape recognized as the typical leaf? The little leaves themselves replied: "We are the result of poor, unfavorable conditions; we had neither strength nor vitality sufficient to