to be somewhere in the bight of sea between Cape Barnegat and Fire Island light.

— Dr. Rufus Haymond, a well-known student of vertebrate zoölogy, and one of the pioneer naturalists of the Ohio valley, died at Brookville, Ind., July 29, at the age of 81 years. He was a native of Virginia, and came to Indiana in 1826.

— Mr. B. W. Evermann, late of Indiana university, has been elected to the chair of natural sciences at the State normal school, Terre Haute, Ind.

— Mr. George H. Boehmer of the Smithsonian institution leaves Washington during the present month on a European mission, as agent for the library of congress and the Smithsonian, in perfecting a more systematic and satisfactory method for the international exchange of public documents published by each country.

— Mr. Nathanel H. R. Dawson of Selma, Alabama, has been nominated by the President for the position of commissioner of education.

— Rev. Charles Henry Appleton Dall, father of Dr. Wm. H. Dall, the conchologist, died at Darjiling, India, on July 18. He had been for more than thirty years in the missionary service.

— Spirits of turpentine will remove unpleasant odors from the hands when all other deodorants fail.

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.*

Feline telepathy.

IN the issue of your admirable journal for July 31, 1885, the then editor, my esteemed friend Prof. S. H. Scudder, a distinguished histologist of special eminence in entomology, does me the honor to notice my censorship of the American society for psychical research, and passes the compliment of calling me 'the well-known ghost-smeller,' perhaps with some 'occult' reference to my psychical researches.

Neither affirming nor denying this hard impeachment, I beg to cite Professor Scudder himself in connection with the interesting and instructive psychic researches now in progress concerning telepathy. I submit that the eminent entomologist is in his own person a demonstration of telepathy; and no false delicacy should make him shrink from offering himself as a good subject for telepathic experimentation on the part of the members of the American society for psychical research.

No one more than myself, among Professor Scudder's friends, sincerely deplores the painful affection of the respiratory passages from which he suffers when brought within a certain radius of a cat. It may be some mental consolation, if no alleviation of the difficulty of breathing, for the professor to reflect that his case is an interesting and valuable one for the purposes of psychic research, since it is able thus to offer an important contribution to the science of telepathy.

If I am correctly informed, Professor Scudder does not require to see the cat, or hear the cat, or smell the cat, or taste the cat, or touch the cat, in order to become painfully alive to the proximity of the animal, in the way above said. None of his physical senses is concerned in the psychic cognition of the cat and its painful bodily result. This is telepathy, namely, thought-transfer without any known or recognized physical or mechanical means of communication. Professor Scudder is evidently telepathic with cats, as a psychist would express it. What subtile connection there is between the anthropoid and the aeluroid organisms in this case, resulting in such violent antipathy and respiratory derangement on the one hand and such complacent sympathy or entire apathy on the other, is hard to say; though it may be suggested that asthmatic breathing resembles purring in some audible respects. Whether any real mind-reading is here involved is doubtful, because it is impossible to say what cats think of Professor Scudder; though what this amiable gentleman thinks of cats, while under the shock of the feline telepathic impact, and also subsequently, is well known to the large circle of his friends.

When I was appointed by the Theosophical society its official censor of the American society for psychical research — a delicate and difficult office, which I reluctantly accepted about a year ago in the interests of psychic science — it became incumbent upon me to explain to the psychical society any fact in psychic science which they might succeed in establishing.

I cannot admit that the said society has established this case of telepathy, considering that I have been obliged to do so for them. But since one of their members has been the unwitting means of demonstrating feline telepathy, I pass the credit of the discovery over to the psychical society, with the compliments of the Theosophical society, and offer my explanation of the matter. It is the same 'Explanation of telepathy' which was printed in the New York *Nation* of Jan. 15, 1885, after Professor Scudder, with tender regard for my reputation as a scientist, had declined to publish it in *Science*, of which he was then editor.

All animals, plants, and minerals disengage from their bodies a substance variously called 'biogen,' 'od,' 'akasa,' etc., this aura or ultra sensible emanation having certain modes of motion which are the direct means of 'phenomenalizing' or making apparent to the natural senses those effects known as 'mesmeric,' 'magnetic,' 'nervauric,' 'telepathic,' 'spiritistic,' etc. Professor Scudder happens to be so constituted, in relation to cats, that the feline biogen, impinging upon the Scudderian, immediately makes him think of cats, transfers his thought from all other objects of interest to cats, fixes his mind upon cats, excites a violent 'psychic storm,' or emotional disturbance, and results in the painful physical derangement above noted.

It would interest any student of psychics to ascertain whether the eminent entomologist who furnishes this case does not suffer in much the same way from various other animals, as horses and cows. I venture to surmise that such will be found to be the case.

Any other explanation than I have given does not occur to me as probable. A physicist or biologist,

however, might base an opinion contrary to mine, on the ground of common zoölogical ancestry, heredity, atavism, and so forth, according to the general principles of evolution.

Not even a 'well known ghost-smeller' should retort by calling Professor Scudder a hitherto unknown 'cat-smeller,' because that would not be polite, and because the learned professor does not smell cats, in point of fact, when he enters into telepathic relations with those zoölogical organisms. And then, too, his apparent inability to become cognizant of unembodied human intelligences by means of telepathy may be more a matter of necessity than of choice. Should he ever succeed in establishing telepathic relations with a ghost, let us trust he will find such method of communication less painful to his respiratory apparatus, and more conducive to his peace of mind.

ELLIOTT COUES, F. T. S.,
Censor A. S. P. R.

Washington, D.C.

Barometer exposure.

In President LeConte's last letter (*Science*, vol. viii. p. 80) he suggests that the effects of the wind on the barometer should be farther experimented on; since "it is evident, that, according to the conditions of exposure, the influence of the wind must tend sometimes to increase, and at other times to diminish, the pressure within the building in which the barometer is placed." Mr. Gilbert's and Mr. Todd's experiments (*Science*, vol. vii. p. 571, and vol. viii. p. 58) certainly indicate that the pressure is higher on the windward than on the leeward side of objects; and I have frequently found at Blue Hill observatory, that, if a window or door be opened on the side against which a strong wind is blowing, there will be a rise of the barometer in the building, and a fall again when the window is closed.

This does not prove, however, that the effect of the wind on an in-door barometer is as likely to make it read too high as too low. Both deduction from theory and induction from all of the facts so far gathered, I think, indicate, that, under all ordinary conditions, the effect of the wind must be to make an in-door barometer read too low. The experiments of physicists clearly demonstrate that air, in moving by at right angles to an aperture, lowers the pressure within; hence, while wind would tend to increase the pressure on the windward side of a building, on every other side and at the top of the building the tendency must be to reduce the pressure; and the total resultant must be a decided lowering of the pressure within the building during a strong wind. These points were only omitted from my first letter because I was desirous of being brief.

The effect of wind in lowering the pressure is probably strongly felt on board of ships, where the bottom and sides are tight, and the wind blows directly across the apertures at the top. This, perhaps, in part accounts for the very low readings sometimes reported in severe storms.

In his 19th paper (*Amer. journ. sc.*, Dec., 1883), Loomis makes a careful comparison between the observed gradients in severe storms and those computed by Ferrel's formula. The storms were those occurring on the Atlantic Ocean and in the United States; and comparisons were made on that side of the storms where the winds were strongest and gradients steepest. He found that the observed gradients were always larger than the computed gradients, and the latter had to be increased by a a suitable constant to equal the former. In these cases, might not the observed gradients have been only apparent, and partly due to erroneous readings of the barometer produced by a greater wind velocity near the centre of the storm?

H. HELM CLAYTON.

Blue Hill meteor. obser., July 26.

The swindling naturalist caught.

The geological swindler described in *Science*, p. 308, No. 165 (April 2, 1886), has finally been entrapped and captured here, and is now in jail at Kankakee, Illinois, for the sale of books which he borrowed from a gentleman in that town.

He passed here as 'Captain Lindley' of the U. S. army, detailed as 'instructor in geology' at West Point. I need not say that there is no such name in the Army register nor on the roster of instructors at the military academy.

As he will undoubtedly be sentenced for at least a term in jail, it is much to be desired that those who have heretofore been swindled by him may communicate promptly with the sheriff of Kankakee county. If he is not vigorously prosecuted, it will soon become necessary for the naturalist to carry a passport in travelling through this region.

S. A. FORBES.

Champaign, Ill., July 28.

A brilliant aurora.

At 9 P.M. on July 27, an arch of an aurora was noticed here through the clouds in the north-east. At 10.45 P.M. the sky was clear and a brilliant auroral arch stretched entirely across the northern sky with a height above the horizon of 15° or 20° and a width of about 5°. Beneath it the sky was very dark; but from its top stretched upward to within about 30° of the zenith the most brilliant streamers, which danced and flickered, and during the ten minutes preceding 11 P.M. showed beautiful colors at their base. At 11.10 P.M. the arch had become dimmer, and the streamers had developed into patches of light which stretched up still nearer the zenith. At this time waves or pulses of light shot upward from the north in rapid succession and moved with great rapidity. These continued, but the auroral arch gradually died away, and at 11.20 P.M. only patches of white light were visible, which covered about three-fourths of the northern sky. At 11.27 P.M. a large patch of white light in the north-east began visibly to move upward toward the zenith, and the patches on all sides began to extend in the same direction; so that by 11.30 P.M. the whole northern half of the sky was covered with patches of pulsating light. At 11.32 P.M. the patches extended eight or ten degrees beyond the zenith, and the magnetic zenith became apparent by the arrangement of the patches around it. After 11.35 P.M. the aurora began to die down, and by midnight only a whitish glow was visible in the north. At 2 A.M. of the 28th the conditions remained much the same as at midnight.

A number of meteors were seen in the north-east while watching the aurora.

H. HELM CLAYTON.

Blue Hill meteor. observ., July 28.