

A man who walks about the streets, and who receives crowds of visitors daily, may, by the aid of an intelligent friend, obtain food in spite of the strictest surveillance. On the other hand, in these experiments more attention ought to be given to variations in weight, hourly as well as daily, and also to the excretion of urea. If these points were carefully studied, interesting and useful facts could be learned, and a better control of the patient secured. Of course, these experiments of Succi and Merlatti have brought forward numerous imitators, and many Italians may be met here who profess to be able to fast three, four, or even six months. Some, like Succi, pretend to possess a marvellous liquor; others, like Merlatti, do not. There is one faster in Brussels, another in London, a third in Algiers, while others flock in to Paris from different towns; and the daily papers publish a great number of anecdotes of persons of all descriptions and ages and colors who have lived longer or shorter periods of time without taking a morsel of food. But these stories are not much believed in. Many comments have been drawn forth from medical quarters by the fasting experiments mentioned, M. Bernheim of Nancy offering the ingenious suggestion that they may be accounted for on a theory of 'auto-suggestion.'

A work of much interest was begun some time ago in Cairo, — that of disinterring the Sphinx of Giseh. According to the latest reports, about one-third of the sand in which it is embedded has already been removed. The fore-paws and the right side have been partially brought to view. The paws were not hewn in the stone, as the rest had been, but were built up of bricks, owing, no doubt, to the less solid nature of that part of the stone in which they would otherwise have been carved. Viewed from above, the disinterred part seems inharmonious, but a judgment as to the general effect cannot be formed until the sand is entirely removed. It may then prove to be of less harmonious proportions than such monuments generally are; and in that case, as M. Maspéro thinks, it must be ascribed to an age more remote than that of the pyramids.

The conseil général of the department of the Seine decided at a recent meeting that it would be necessary to create a laboratory for the study of contagious diseases of animals. This is for the special purpose of preventing diseased meat from being introduced and sold in Paris.

A curious lawsuit is pending before the court of justice of Paris. It is especially curious on account of the facts upon which it is based, the pretended discovery of a method of extracting considerable amounts of gold from buhr-stone,

a siliceous stone of tertiary formation, very abundant in the neighborhood of Paris. One chemist has declared, that, by the aid of this new method, from three to two hundred and forty grams of gold may be extracted from each ton of stone. Another says he has found as high as five hundred grams per ton, besides silver and other metals. On the other hand, civil engineers say they have not found an atom of the precious metal in the stone. Three hundred dollars in gold would certainly seem a pretty good yield for that sort of rock; but the whole thing seems chimerical yet, and the people who have invested their money in the business say it does not pay at all. They do not believe in the method now, and have begun suit against the inventor to recover the coined gold he extracted from them.

Professor Lépine of Lyons has published in the *Semaine médicale* a paper on the physiological action of a newly discovered antipyretic or antifebrile, studied by MM. Cahn and Hepp of Strasbourg a short time ago. This antifebrile does not affect the healthy organism when given in a fifty-centigram dose. If a greater quantity is given (double or treble the dose mentioned), there may be present some cephalalgia, with cyanosis. When given to feverish patients, it abates the fever in a marked manner. It must be given at the highest point of the daily rise of fever, or, better, an hour before, in case the precise moment is known beforehand. The dose of fifty centigrams is the one usually preferred. The patient derives great benefit, the body temperature remaining normal or low, the heart pulsating with the same or increased energy, with a general feeling of well-being present. Some very remarkable cures have been effected in cases of typhoid and malarial fever. Professor Lépine speaks very highly of the antifebrile in cases of feber dorsalis as an agent to be used when neuralgic pains — so very rebellious and troublesome to the patient — are present. One or two fifty-centigram doses are enough in most cases, and the pains disappear in about half an hour. This fact, a useful one to know, had not been heretofore noticed. V.

Paris, Dec. 20.

#### NOTES AND NEWS.

THE administration of General Hazen as chief signal officer is to be credited with the organization and encouragement of our system of state weather-services, which is rapidly extending in all parts of the country. This work is especially in charge of Lieutenant Dunwoody, and local services are now established in Louisiana, Alabama, Nebraska, Mississippi, Georgia, Minnesota, Ohio (by legislative enactment, making an appropri-

ation of two thousand dollars per annum to equip and sustain it), Indiana, Tennessee, Iowa, Illinois, Missouri, New Jersey, Michigan, Kansas, and New England (under the auspices of a meteorological society). North Carolina, South Carolina, Pennsylvania, and Arkansas are in the process of organizing them. Dr. C. W. Dabney, jun., has been appointed director of the North Carolina, with headquarters at Raleigh; and the first number of his *Weather-review* for December last promises a successful service. Already a hundred and sixty-five towns and stations are informed of the daily weather-predictions, by special messages repeated from Raleigh; and at thirty-two of these points flag-signals of the new pattern are now displayed for public information. By combination of telegraph and post-office service, the announcement of cold-waves will be made very general. Local observation will also be attended to, and twenty-nine stations were to be equipped ready for record by the first of the year, besides eleven signal-service stations in and near the state. No funds are as yet appropriated by the state for cost of instruments.

—The report of Dr. Willis G. Tucker, analyst of drugs to the state board of health of New York, contains much that is of interest to the public, dealing as it does with the drugs which are daily prescribed by physicians in the treatment of disease. The total number of samples collected and examined was 194, of which 49.2 per cent were found to be of good quality; that is, to conform to the requirements of the U. S. pharmacopoeia; 29.2 per cent of fair quality falling not far below these requirements, and 19.1 per cent of inferior quality, some of them being entirely fictitious. The cream-of-tartar which was purchased at the drug-stores showed 96.24 per cent of purity, while that from the groceries was but 87.48 per cent, and one sample only 79.31 per cent. In addition to these, eight others were purchased at groceries and purported to be cream-of-tartar, but were, in fact, either grossly adulterated or entirely fictitious, being made up of acid phosphate of lime, starch, and sulphate of lime. Dr. Tucker's advice would seem to be, that, when pure cream-of-tartar is wanted, it should be obtained from the drug-store, and not the grocery. The vinegar sold at the groceries also comes in for condemnation. Dr. Tucker says that an article so largely used in the preparation of food ought to be both free from adulteration, and of good strength as well; but the results of the examinations so far made, show that here, as elsewhere, wide differences in quality exist. The addition of mineral acids is very uncommon; but much vin-

egar is sold which has been plentifully watered, and the greater part of that sold as cider-vinegar is a so-called white-wine vinegar colored by caramel, with perhaps some cider-vinegar added to give flavor. 85.2 per cent of the samples examined came below the legal requirement. The standard required is "not less than four and one-half per cent by weight of absolute acetic acid in all vinegars." Only 14.8 per cent of the samples tested contained the required amount, the highest percentage being 6.2, and the lowest 1.8, the average being 4 per cent.

—The crown and flint glasses of the great objective of the Lick observatory arrived safely at the summit of Mount Hamilton on Monday, Dec. 27.

—Since printing the article in last week's *Science* on 'The prisoners of the Soudan,' we learn by papers from Europe that Mr. Stanley offered his services to the English government to command an expedition to be sent to the relief of Emin Bey; that this offer was accepted, the expenses, estimated at \$150,000, to be defrayed by the English and Egyptian governments. Mr. Stanley, immediately upon his arrival in England, after conferring with the English government, went to Brussels to obtain permission of the king of Belgium, as the head of the Kongo Free State, to undertake this expedition. Mr. Stanley goes directly to Zanzibar, thence to the south end of Tanganyika, and thence all the way by boats to Wadelai. The Belgium papers say that this is a much longer and more dangerous route than the one by the Kongo and the Arouhuimi.

—The *American railroad journal* and *Van Nostrand's engineering magazine* have been consolidated, now appearing as the *Railroad and engineering journal*, under the editorial management of M. N. Forney. The new monthly is devoted to the discussion of engineering and mechanical topics, with special reference to railroad construction and operation. The January number is well illustrated, and contains a good table of contents.

—The following are the recent assignments in the *personnel* of the coast-survey service. Asst. J. D. Baylor has left for Cedar Keys, Fla., to establish magnetic stations between that place and Washington, some seven or eight in number. He will finish the work about April 1. Asst. O. H. Titman and Mr. Henry G. Turner as aid have taken up the primary triangulation work from Alabama towards Mobile; Asst. J. B. Weir, Sub-Asst. McGrath, and Mr. W. D. Fairfield have left Washington to take up the transcontinental geo-

detic levels; and Asst. F. W. Perkins will organize his party about Jan. 15 for work on the south coast of Louisiana. All parties on the Pacific coast are out of the field, except those parties engaged in the resurvey of San Francisco Bay and vicinity. Early in April Assistant Pratt will take up the recognizance of the west coast of Washington Territory from Cape Flattery to Gray's Harbor, a very important work. The steamer Bache has arrived at Key West preparatory to entering upon field-work on the west coast of Florida.

— The Cosmos club of Washington held its first regular meeting for this year in its new clubhouse last Monday evening. The following officers were elected: president, Dr. John S. Billings; vice-president, Dr. John S. Yarrow; secretary, T. M. Chatard; treasurer, William Bruff; house committee, Mr. J. B. Marcou, Dr. John F. Head, and Mr. William Poindexter; library committee, Dr. S. M. Burnett, Dr. Newton S. Bates, and Mr. Joseph C. Hornblower. The proposition to increase the membership was postponed to a special meeting to be held Jan. 31.

— Governor McEnery of Louisiana has issued a call for an interstate convention in the interest of stock-raising, dairying, fruit-growing, and general agriculture, to be held at Lake Charles, La., on the 22d, 23d, and 24th of February, 1887.

— A curious affection exists among the horses of north-western Texas known as 'grass-staggers.' It is caused by their eating the 'loco-weed,' and the affected animals are said to be 'locoed.' At first they lose flesh, and then become weak and staggering, and finally crazy. The Indians believe that an insect is the cause of the disease; but Dr. Carhart of Texas, in a letter to the *Medical record*, says that he has examined the weed, but can find no insect life upon it.

— A remarkable specimen was presented some years ago by the curator of the British museum to the Zoölogical society of London. It was the body of a chicken whose beak and feet closely resembled those of a parrot. Several such instances occurred in the same poultry-yard, and were attributed by the owner to the fact that one of the hens had been frightened by a parrot. Many instances of deformity are on record in the human species, which are popularly attributed to maternal impressions received during the formative period. The number of these is so great as to have led physicians and others to look upon such results as something more than mere coincidences. In a recent paper read before the orthopedic section of the New York academy of medi-

cine, Dr. T. L. Stedman discusses the influence of maternal impressions in the etiology of congenital deformities, and produces evidence which seems to indicate that there are laws in development which are as yet but partially understood, and which, when thoroughly investigated, may explain these remarkable instances to which we have alluded, and of which Dr. Stedman gives many striking examples.

— The presence in New York City of a number of cases of beri-beri, or kak-ke, has re-awakened medical interest in this peculiar disease. The patients came from San Francisco by vessel, and three of them were taken to Bellevue hospital. Two of these died. On the voyage, most of the crew were affected with the disease, and some of them fatally. This affection prevails in Japan, India, South and Central America, and in the islands of the Gulf, and is technically considered to be a multiple neuritis, or an inflammatory condition of the nerves. As a rule, the spinal nerves alone are implicated, but occasionally the cranial nerves as well. It has been demonstrated with a great degree of probability by Cornelissen and Sugenoja that beri-beri is an infectious disease, the specific cause being a micro-organism resembling the bacillus of anthrax, which is found in the blood, muscles, and nerves. In the cases at Bellevue the nature of the disease was not recognized at a sufficiently early stage to enable the physicians to study the microbes, or to make any cultures of them.

— We are familiar in the east with tumbler-pigeons, and in the Central States there are curious beetles, that, from their habit of rolling along little balls of clay, have received the popular name 'tumble-bugs;' but it is upon the plains of the west that one of our common weeds is so modified by its environment, and forms habits so novel, that it loses its eastern name, and is known as 'tumble-weed.' According to C. E. Bessey (*Botanical gazette*, xi. p. 41), "upon the plains and prairies of the west our common weed *Amarantus albus* grows into a compact plant, whose stout, curving branches give it an approximately spherical form. The autumn winds break the main stem near the ground, and the upper part goes rolling and tumbling before the wind, often for miles. This is an excellent illustration of the effect of climate on the physical development of the plant-body, as in the east the species is a straggling herb, remaining rooted long after its death at the close of the season. Dr. Newberry has told us that it is also known as the 'ghost-plant' in allusion to the same habit, bunches flitting along by night producing a peculiarly weird

appearance. It is doubtless very efficient in the distribution of the seeds, and accounts for the wide dissemination of the species on the plains. Professor Bessey notes a similar habit in *Baptisia tinctoria* on Martha's Vineyard, Mass., and *Panicum capillare* might also be cited as another example."

#### 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.

##### Atmospheric lines in the solar spectrum.

Excuse me; but in Professor Pickering's note on p. 13 of *Science* for Jan. 7, have not the types twice made him change M. Cornu's name to 'Mr. Conner'? If so, you best know whether the misprint be worth your correcting, though it was a very natural one for the printer to make. JAMES EDWARD OLIVER.

Ithaca, N.Y., Jan. 9.

##### A hairy human family.

The abnormal growth of hair, that has been not rarely observed since antiquity in individuals of different races of mankind, presents various points of interest other than anthropological ones. As Professor Mason has stated (*Science*, ix. No. 205), its recently recognized cause is the persistence of the prenatal downy hair, 'lanugo' as it is called, and its rich growth through life; or rather, to speak more accurately, the non-development of the hair-follicles to adapt them to the growth of normal hair. This persistence of the embryonal covering is most strikingly shown, as a normal condition, in the ostrich (*Ratitae*), Apteryx, and penguin, where the hair-follicles, or, what is anatomically the same, the feather-follicles, produce through life the soft downy plumage of the chick only. This loss of the foetal hair, which takes place with the general exfoliation of the cuticle during the first year of life, is not characteristic of man, but occurs in many other, though not all, mammals. Wiedersheim (*Vergl. anat.*, 31) sees in this lanugo, and its abnormal development in the 'hair-men,' a probable evidence of an abundant covering of hair at some early period of man's ancestry.

The extent to which this abnormal growth of the downy hair may reach will be better appreciated from the picture, here given, of Teftichew (or Testichew), the elder Russian 'dog-man,' than can be from any description. The 'animal' or dog-like appearance in this case is more striking than in any other of which I have seen illustrations, though the Amras family of the sixteenth century presented a very similar aspect. In this family, the father, son, and daughter were all covered, according to the paintings and descriptions now extant, over the entire body with long hair, with the exception of a space below the eyes.

In the notable case of Julia Pastrana of Mexico, a most repulsive-looking person in her picture, the hair of the head, forehead, and face, was coarse like ordinary hair, and her cheeks and nose were nearly bare. She died in 1860, in giving birth to a son, who early showed similar hairiness on head and face. The prenatal hair is not necessarily soft and downy. Pathological conditions will cause it in places to be

coarse, like that of the adult; and cases are known where the larger part of the body has remained through life covered with a thick coat of strong hair, due, in reality, to an enormously large mother's mark. A similar condition is found in the coarser and more bushy growth of the beard from long-continued neuralgia or nerve-irritation.

Yet another point of interest is the undoubted



JULIA PASTRANA.

ADRIEN TESTICHEW.

tendency to heredity which these abnormal cases show. Thrice has the anomaly been known to be developed in the second generation; and once, the Birman family, in the third generation. On the other hand, the precisely opposite condition, that of absolute hairlessness from prenatal causes, not a few cases of which have been observed among different