

MUNN & COMPANY, Editors and Proprietors.

PUBLISHED WEEKLY AT NO. 37 PARK ROW (PARK BUILDING), NEW YORK.

O. D. MUNN, S. II. WALES, A. E. BEACH.

The American News Company," Agents, 121 Nassau street. New York. The New York News Company,"8 Spruce street. A. Asher & Co., 20 Unter den Linden, Berlin, are Agents for the Geran States

137 Trubner & Co., 60 Paternoster Row London, are also Agents to receive subscriptions.

VOL. XIX., No. 12...[NEW SERIES.].... Twenty-third Year

NEW YORK, WEDNESDAY, SEPTEMBER 16, 1868.

#### Contents:

(Illustrated articles are marked with an asterisk.)

#### HIPPOPHAGY.

The New York Medical Journal, for August contains a long article which takes strong ground in favor of the introduction of hippophagy among the civilized races of Europe and America. The name, which is probably supposed to confer dignity upon the subject, means the practice of eating horseflesh. The first argument adduced in its favor is the humanity of the practice. . The poor old skeletons of horses, which are seen dragging themselves and fish, fruit, or oyster wagons through our suburban streets, and the poor women who painfully labor, early and late, seem to have been specially made to supply each others necessities, and to mutually alle viate each others' woes. The latter by eating, and the former by being eaten, will thus fulfill the end which kind Providence foreordained for them, and which nothing but silly prejudice and religious bigotry have hitherto prevented. It is not pretended that anything but old horses can be afforded for food, and it is only such that it would be humane to est. It is urged, that in refusing to eat horseflesh, the civilized races are an exception to the rest of mankind. We freely acknowledge that the civilized races do not eat many things that are considered excellent diet in many parts of the world. Rats, dogs, insects, and the bodies of men themselves are to be found upon the well-furnished tables of people in various parts of the globe. Neither are such people so nice in their distinctions about the parts of animals which are fit to be eaten, as their more civilized brethren. They avoid the extraordinary waste of food attendant upon the practice of dressing the bodies of animals in vogue among us. It is with feelings of envy that we read of an African native devouring the warm, raw entrails of recently slaughtered beeves, and we are almost inclined to urge upon the soft-hearted hippophagist who so ably sets forth his views in the New York Medical Journal, that it would be a good thing to call the attention of poor women to this cheap (and save for vulgar prejudice) good, wholesome, and even palatable diet.

It is stated that the advent of Christianity put an end to the use of horseflesh as food in ancient Germany, and in other parts of the world, where it had been in use among the pagans for "sacred feasts, and for pagan altars;" and that it was the love of Christianity that put a stop to the practice in Iceland. We feel sorry that Christianity, which we have been hitherto disposed to regard as the great regenerating element in this otherwise benighted world, should have so afflicted old horses, depriving them of the blessing of being knocked on the head as soon as their strength began to decline, to reappear upon the tables of the poor in all the different forms of roast, and boiled, and hashed, and warmed over, which it is so delightful and appetizing to think of. It is within the limits of reason to suppose that colts, sometimes deformed from birth, might be killed, at an early period of life, when their flesh would be almost equal to yeal, and the suffering poor might then be admitted to the luxury of colts foot jellies, and cutlets. Boiled colt's head seems a good dish for the poor, and the broth would be of service in case of sick ness.

The Cossacks eat horse, and even drink the blood of the animal. If they can do this, the custom is, of course to be recommended to the civilized poor, and doubtless a good drink of horse blood would enable many a miserable seamstress to accomplish one shirt per diem more than she could without, and it would certainly be better than the blood of "John Barleycorn," which is now too often indulged in, and is also more expensive.

It is admitted, that its taste is peculiar, and that it is apt to be tough; but then the appetites of the poorer classes are known to be excellent, and their teeth are generally good because they don't eat many sweetmeats. So these objections are of no account.

man, and is a most horrible, loathsome, and fatal disease. To this, it is answered, upon the authority of one Raver, who is said to have experimented upon the meat of horses which had the disease, that it is not communicable after the flesh is boiled. Now what poor woman can be so blinded by prejudice as to refuse horseflesh after that. It reminds us of the old lady who advised her son to always eat his chestnuts "biled," because "biled worms were never known to hurt anybody." Who knows but glanders and poll evil may not putation of the leg, as that operation is more terrible than yet be discovered by some savant to impart rich and peculiar flavors to the flesh of old horses; or that soup, made from the spavined shinbones of these animals, may not prove a specific for the scrofulous taints engendered by filth and dark-

Surely the civilized world ought to hail the resumption of hippophagy, and erect monuments to the humane individuals who have been instrumental in reviving the practice. We think it would be well, also, to give some attention to cats and dogs. They are easily raised, and can also be killed at an age when their lives have become a burden, and would no doubt furnish good food for paupers. The Government should immediately provide for the supply of such meat to the prisons and almshouses, and it might not be inexpedient to serve it out in rations to the army and navy; thus lessening the public expenditures and aiding in the payment of the national debt. Let us hope, friends of humanity! A new era is dawning. Let not our prejudices obstruct its advent.

### THE PROGRESS OF CHEMICAL SCIENCE.

Until a very recent period the science of chemistry was made up almost exclusively of facts. The classified results of elaborate and accurate experiments; the relations which exist between the elements of matter and the properties not only of the elements themselves, but of the complex substances formed by their combination; the effects of the physical forces upon combination generalized and reduced to a system, so far as the knowledge of these subjects would admit, constituted the text of the able and numerous treatises that had been written upon the subject. The science has begun to assume a new aspect. The speculative minds have been engaged in framing hypotheses to account for the manifestations of the laws which govern combination. Not content with this they have extended their speculations to the nature of matter itself, and theories which embrace the ultimate form and condition of matter, as well as the forms recognized or recognizable by the senses, are boldly put forth and stoutly maintained.

The objection to such speculations is that no important purpose is subserved by them, while their tendency is to complicate nomenclature and occupy the minds of men with theories which assume to account for facts rather than with investigation and study of facts themselves. It is not sufficient for the establishment of an hypothesis that it accounts for a fact. Because a man might ride in railroad cars from New York to Philadelphia it is not to be inferred that he did ride by that conveyance. There is the possibility that he rode in his carriage or took passage by water. Speculating as to how he made the passage would amount to nothing toward ascertaining the fact, except to guide research into the channel of possibilities.

Now if speculation in physical science were confined simply to indicating the possibilities in the discovery of new facts, we should not say a word against it. That is its true sphere. But when it passes that limit and usurps the place of fact itself it is to be deprecated.

The aim of the modern speculations in the science of chemistry seems to be the demonstration of matter as it exists in its ultimate condition. If this were possible, and a knowledge of matter in that state could be of any service, there would be no objection to them. The old atomic theory never was fully accepted by physicists, and was only accepted at all as an hypothesis, which accounted for certain facts in chemical combination. It was never of any real value, never aided in any important discovery, and we are confident that as it has had its day so the new and more ambitious hypotheses will have theirs. We even doubt that many of these will satisfy the minds of thinkers as well as that did.

The chemist never deals with matter in its ultimate condition. It is with masses that he as well as all others must be content to experiment. The laws which matter obeys in its combinations he may discover, but the essential nature of matter itself is not physical study; it is metaphysical, and it is an ignisfatuus that will ever elude pursuit.

The atomechanics of Hinrichs, the rational cosmology of Hickok, and the speculations of Sir Benjamin Brodie, are all to be classed in the category of speculative philosophy. They are attempts to get back of matter into a field which the human mind ean never explore, and like all such speculations we believe them calculated to obstruct progress rather than to confer any solid benefit upon science.

## NITROUS OXIDE AS AN ANESTHETIC.

The great blessings which have resulted from the use of anesthetics can not be over-estimated. Those who have never witnessed a severe surgical operation unaccompanied by their administration, and also contrasted it with one in which their valuable aid was resorted to, must utterly fail to realize the amount of suffering which has been spared the afflicted by these agents. Previous to their introduction nothing could be more horrible, to one not steeled by long practice, than a capital operation. The most agonizing tears and shrieks were wrung from the stoutest and bravest men, while the vain struggles and cries of children, helpless in the arms of powerful assistants, or strapped to the operating table, rendered

The horse is subject to glanders, which is communicable to fainting, which often resulted from sheer pain, a blessed relief. Those who are unconversant with the art of surgery, generally suppose that the amputation of a limb is one of the severest of operations. Having read of the bravery of men who could sit and smoke a cigar during an amputation, they fancy that such manifestations as we have described are to be attributed to weakness of resolution, to an enfeebled and shattered nervous system. But every surgeon knows better. There are operations that are as much more terrible than amthe extraction of a tooth; many of which are only rendered possible by the use of anesthetics. Operations that were once the dread of the surgeon, as well as the patient, in which the deviation of a hair's breadth, in the direction of the knife, might invade vital parts, requiring perfect steadiness, both in the operator and the subject, are now successfully performed, the patient quietly sleeping during the otherwise long minutes of anguish, the very shock of which formerly often caused death.

Notwithstanding all that we have said, the use of anesthetics is attended with some risks, and it is just that the public at large should know this fact and fully appreciate it. More especially is it important, that the different substances used for this purpose, and their peculiar merits and demerits should be well understood.

In the use of chloroform, most of the deaths which have occurred have been in brief and minor operations. As a result of this fact, there seems to be an increased tendency to substitute the protoxide of nitrogen (laughing gas) in such operations. It has the advantage of being more rapid in its action, i.s effects cease sooner, and no nausea or depression result from it, unless the gas should be improperly prepared. Experiments have satisfactorily shown, however, that this agent cannot be used successfully for long and tedious operations—that its action is very irregular—that neither in its chemical constitution or its physiological action does it much, if at all, resemble the true anesthetics; for, while with them, though every other element may be excluded, carbon must always be present, and the condition of the blood, heart. lungs, and other viscera, after death from it, is dissimilar from the condition after death from them. These objections are quite sufficient, without taking into account the many inconveniences of its preparation, preservation, and transportation, to prevent its ever being employed in the actual practice of surgery. Caution is needed, both in its manufacture and administration, as by carelessness the noxious deutoxide of nitro. gen may easily be generated, and if the gas is not properly tested, and its impurities carefully removed, serious results may follow.

Mr. Colton, who is now in London, produces an autograph scroll of twenty seven thousand persons who have inhaled the gas in America for extraction of teeth and for minor sur gical operations, with the most satisfactory results; pain having been annihilated, and the unconsciousness having passed away within one or two minutes, leaving only agreeable recollections. Some of the entries on the scroll are amusing. ly characteristic. Many of the patients " have had a high old time;" some "would have teeth pulled that way all day long." Here and there comes a bit of poetry, effusive and grateful, but not destined to immortality. Curter entries of "delightful dreams" are abundant. One gentleman, who came six thousand miles, thinks the journey not too long for the re-

It has, notwithstanding, its rivals. The chloride of carbon, the chloride of olefiant gas, and the bromide of ethyl have been proved to be safe, pleasant, and efficient anesthetics. Even the common coal gas has been stated to be a useful anesthetic, and one which, in an emergency, might be used to advantage. Though chloroform and ether still remain as much in favor as ever for capital operations, for dentists' use and minor operations the above mentioned anesthetics are becoming quite popular, as substitutes for laughing gas.

# "SMALL POTATOES."

There has been a tendency in all ages, and among a races of men, to attach to certain expressions a pregnant meaning, differing entirely from the literal signification of the phrase, but which, in its figurative or "slang" sense, is exceedingly forcible. The expression, " It will do to tie to," grew out of the practice of fastening horses to small trees in unsettled portions of the country, and it has come to be applied to individuals as expressing all those qualities of honor, truth, and stability, which render men worthy of confidence. In the same way has the expression "small potatoes come to mean defective morals, want of talent, and general instability of character.

The world is full of grumblers, who declaim against the fickleness of fortune, the favoritism shown in the advance ment of men to places of honor and profit, the neglect of merit, and the injustice of Providence. Envious of the socalled good luck of others, instead of setting themselves steadily and persistently to bettering their condition, they cultivate a morbid feeling of disgust at their lot and their work, and become mere time-servers. In other words, they are, and will always remain, small potatoes, of the meanest sort. Grumbling of this kind is one of the principal charac teristics of the human small potato. A man may possess mind, education, and other qualifications for high station. but if he does not possess his soul in patience, and do what his hands find to do with his might, biding quietly the time and opportunity for improving his condition, he is small potatoes notwithstanding. When the basket is shaken-ax it is sure to be-no matter how many smaller potatoes may have obscured his merit, it will finally be discovered, and if really great, it will be all the more prized, because it has lain so long unnoticed.