

A SENSIBLE FASHION.

A story, good enough to be true, is told of a young Englishman, who had been giving voice to the time-worn complaint of snobbish people about American society: "It is quite impossible, you know, to have a high-toned society where there is no aristocracy."

"What do you mean by aristocracy?" a lady asked. "Why-aw-you-know; I mean ten thousand people who live anywhere and have nothing to do."

"As for that," replied the lady, "we have such a class too; but we call them tramps."

The answer was something more than polite chaffing. There is a world of difference, on the score of comfort and cleanliness, between living anywhere with nothing to do, backed by a fortune sufficient to make life a pastime, and doing the same with a beggar's wallet; still, in spite of the superficial contrast, the moral difference is not so very great. The man whose only claim to consideration rests upon the circumstance that the chance of inheritance has made him able to gratify his selfish desires without personally making any return to the world for what he enjoys, is not intrinsically nobler, nor does he really play a much nobler part in life, than he who lazily sponges a precarious existence from those who have enough to do to provide for themselves. The world owes neither a living; and the fortune of the richer only adds to his moral obligation to do something useful with the superior means at his command.

The idea that a man's merit is in proportion to the cost of his keeping and the unproductiveness of his life has never thriven in this country; and it has always been common for young men of inherited wealth to take an active part in the world's real work. In the industrial, as well as in the professional world, honorable success has been won through manly exertion by many a young man who might have squandered his time and fortune in idleness or worse. And if the tendency of flush times had been to cultivate a different spirit among the sons of the suddenly rich, the financial overturnings of the past five years have shown far too plainly the risk attending a youth of dainty idleness to give the vicious tendency much encouragement. Indeed the popular current seems rather to be strongly setting in the opposite direction, and it is quite the fashion now for young men of wealth to strike out for themselves, particularly in new and non-professional fields.

From Maine to Oregon, from Michigan to Texas, young men of wealth and culture, men who might be idlers—mere society men and nothing more—are to be found among the ranks of the doers, using their fortunes only to help them to larger and more productive labors than the empty-handed could undertake. A Newport correspondent names a number of the sons of the wealthy residents and summer visitors of that fashionable watering place, who are thus employed. Agricultural pursuits attract the most of them. Several are managing farms. Two have gone into the market gardening and milk business, and are making it pay. Two are devoting their time to the raising of poultry on a large scale. Such undertakings in the vicinity of centers of population, wealth, and culture, are more likely to result satisfactorily and profitably than sheep or cattle breeding in the South or West, hitherto the more popular occupations of adventurous and active young men of wealth, since they do not necessitate the abandonment of the enjoyments and advantages of society and friends. The East is full of opportunities for men of energy and means to make money by outdoor operations, and, at the same time, to improve immensely the conditions and character of country life. The drift of young men of spirit and education has too long been toward the cities. It lies in the power of the leaders of the new fashion to set the current in the opposite direction, vastly to the benefit of both city and country.

Meteoric Dust.

Mr. Cowper Ranyard has made a communication to the Astronomical Society on meteoric dust, in which he has thrown out some interesting speculations as to the explanation of the relative distribution of land and water on the globe and as to geological climates. He says that meteoric dust exists to a much greater extent than was formerly suspected. In 1867 Dr. Phipson published the result of many experiments in many countries, which showed that, by exposing a sheet of glass covered with pure glycerine to a strong wind, he has collected on it black angular particles, which he has by chemical tests found to be iron. It is, however, only in the winter months he has found this to be the case. In 1871 Dr. Nordenskjöld collected, by a magnet, meteoric iron particles from snow which had fallen near Stockholm. In 1872 he collected much of it from snow lying on ice in Finland. The Arctic Expedition of 1872 had opportunities of collecting snow far removed from human habitations, and they found large proportions of magnetic particles. M. Tissandier, in 1874-5-6, published in the *Comptes Rendus* a series of papers on atmospheric dust, in which, among other things, he has alluded to the iron found in the dust collected on the towers of Notre Dame. Again, Dr. Walter Flight published in the *Geological Magazine*, in 1875, a paper in which he collected the evidences of iron "dust" found in holes in the ice in Greenland. In 1876 Mr. John Murray published a paper in the "Proceedings of the Royal Society of Edinburgh," in which he gave an account of his examination of the bottom of the oceans and seas visited by Her Majesty's ship Challenger. In many of the deposits magnetic particles were found. It was suggested that the nickel present prevented oxidation, while the fact

that the meteoric particles which had fallen into the sea had not been washed away, was attributed to the water being deep and not near the scourings of land surfaces which would cover it up. Again, in 1876, M. Young examined the iron particles found in the snow which had fallen at the Hospice of St. Bernard. Mr. Ranyard submits that all these facts go to show that meteoric matter falling in the lapse of ages must materially contribute to the matter of the earth's crust. In the course of a year millions of meteors enter the earth's atmosphere. Most of them are "consumed" in the higher regions, but many particles reach the earth without having undergone change. There is little doubt that high above the earth's surface the air is impregnated with dust. The researches of Von Niessl show that many of the meteoric masses enter the earth's atmosphere in directions indicating that they do not belong to our solar system. It is therefore probable that a large quantity of meteoric dust is derived from sources outside our system. The earth and the planets, as they are carried along with the sun in its motion through space, would thus receive a larger proportion of meteoric matter on their northern than on their southern hemispheres, and Mr. Ranyard suggests that this may account for the preponderating mass of the continents in the northern hemisphere of the earth and for the fact that the great peninsulas all taper to the south. Another important inference to which Mr. Ranyard directs attention is that it is known that when meteoric masses are heated large amounts of occluded gas are given off. One of the results from a continuous fall of meteoric matter is that gaseous matter is probably being continually added to the atmosphere. According to whether the earth were passing through a region of space in which there are many or few meteors, the height of the atmosphere would be increased or decreased. When decreased, the temperature at the sea level would be that of our mountain tops and a glacial period would result. When increased, the temperature would probably be like that of the carboniferous period.—*London Times*.

Substitutes for Gold and Silver.

Some very beautiful alloys, applicable as substitutes for gold and silver in the manufacture of jewelry and similar purposes, have been produced by Messrs. Meiffren & Co., of Marseilles. To make an alloy having the appearance and color of gold, they place in a crucible copper as pure as possible, platinum, and tungstic acid in the proportions below stated, and when the metals are completely melted, they stir and granulate them by running them into water containing 500 grammes of slaked lime and 500 grammes of carbonate of potash for every cubic meter of water. This mixture, dissolved in water, has the property of rendering the alloy still purer. They then collect the granulated metal, dry it, and after having remelted in a crucible, they add a certain quantity of fine gold in the proportion hereinafter specified. An alloy is thus produced which, when run into ingots, presents the appearance of red gold of the standard 750-1000, and to which may be applied the name of "aphthite," or unalterable. They can change the color of the alloy by varying the proportions of the different metals. As flux they use boric acid, nitrate of soda, and chloride of sodium previously melted together in equal proportions. The proportion of flux to be employed is 25 grammes per kilogramme of the alloy. The proportions they employ, by preference, for producing an alloy of red gold color are: Copper, 800 grammes; platinum, 25; tungstic acid, 10; and gold, 170 grammes.

The alloy used in imitation of silver consists of iron, 65 parts; nickel, 23 parts; tungsten, 4 parts; aluminum, 5 parts; and copper, 5 parts. The iron and tungsten are melted together, and then granulated, as in the case of the previous alloy, except that in this instance the water into which the mixture is run contains one kilogramme of slaked lime and one kilogramme of carbonate of potash per cubic meter. The nickel, copper, and aluminum are also melted together and granulated by running into water containing the same proportion of lime and potash. Care should be taken during the melting to cover the metals contained in the two crucibles with a flux composed of one part of boric acid to one part of nitrate of potash or niter. In the crucible containing the aluminum and copper they place a lump of sodium of about two grammes in weight when treating five kilogrammes of the three metals (nickel, copper, and aluminum) together to prevent oxidation of the aluminum, and they also add charcoal to prevent oxidation of the copper. Before granulating the metal in each crucible it should be well stirred with a fire-clay stirrer.

The granulated metals are dried, as in the former case, then melted together in the same crucible in the proportions above indicated, and well stirred, after which the alloy is run into ingots. The alloy thus obtained, to which may be given the name of "sideraphthite" (or unchangeable iron), presents the same white appearance as platinum or silver, and is not more expensive than German silver. These improved metallic alloys are capable of resisting the action of sulphureted hydrogen, are unattacked by vegetable acids, and but slightly attacked by mineral acids; they are also perfectly ductile and malleable.—*London Mining Journal*.

Presence of Mind.

Professor Wilder gives these short rules for action in case of accident: For dust in the eyes, avoid rubbing, dash water into them. Remove cinders, etc., with the round point of a lead pencil. Remove insects from the ear by tepid water; never put a hard instrument into the ear. If an artery is

cut, compress above the wound; if a vein is out, compress below. If choked, get upon all fours and cough. For light burns dip the part in cold water; if the skin is destroyed, cover with varnish. Smother a fire with carpets, etc.; water will often spread burning oil and increase the danger. Before passing through smoke take a full breath, and then stoop low, but if carbon is suspected, walk erect. Suck poison wounds, unless your mouth is sore; enlarge the wound, or, better, cut out the part without delay. Hold the wounded part as long as can be borne to a hot coal, or end of a cigar. In case of poisoning excite vomiting by tickling the throat or by water or mustard. For acid poisons give acids; in case of opium poison give strong coffee and keep moving. If in water float on the back, with the nose and mouth projecting. For apoplexy raise the head and body; for fainting, lay the person flat.

A Peculiar Disorder of Bank Clerks.

According to the *British Medical Journal*, Dr. Manouvries has published, in the *Bulletin Médical du Nord*, some novel observations on a disorder to which bankers' clerks are subject under certain circumstances. It has been repeatedly noticed for years that after having handled for some days in succession large quantities of silver five-franc pieces they suffer from disturbances of the respiratory and digestive organs. These troubles have been ascribed to a dark greenish metallic dust, which is raised by taking the coins from the bags wherein they are usually kept, weighing them, and putting them back. This dust impregnates the atmosphere of the room, blackens the skin, and penetrates into the respiratory and digestive tracts together with the air and saliva. As a rule, this process is only gone through at rare intervals during the year, and lasts only a few days, so that the clerks soon recover their health and do not feel much affected by this dust. But in the years 1872 and 1874, when the money which had been paid by France to Prussia as a tribute was returned to France through mercantile transactions, the clerks spent several weeks in handling the coins which had not been taken out of their bags in some years, and the affection spoken of above was now more marked than ever.

The symptoms of this peculiar disease are frequent sneezing, coryza, and angina; the expectorations are black. There is a disagreeable metallic taste in the mouth, spoiling the flavor of food, loss of appetite, colic, nausea, and violent thirst. The bowels are mostly constipated; diarrhea seldom prevails. The blue line along the gums, which is often noticed in patients who have been subject to treatment by silver, is absent. There is great feeling of prostration and frequent headaches. Owing to the peculiar circumstances under which this affection has been first observed, there can be no doubt as to its being due partly to the copper (verdigris) and partly to the oxidized state of the silver; both metals are used in the coinage of the five-franc pieces, in the proportion of nine tenths of silver to one tenth of copper. The constipation seems to be caused by the silver, because copper invariably causes diarrhea. It is said also that silversmiths often suffer from colic, which is caused by their work. The patients were treated with purgatives and a milk diet, and the disorder soon ceased.

Kissing Pets a Cause of Sore Throat.

A writer in the *British Medical Journal*, in a communication to the editor in regard to the possible cause of the recent outbreak of an epidemic of sore throat at Darmstadt, says: "It is well known that women and children are in the habit of kissing pet cats and dogs, especially when these favorites are ill with discharge from the nose, cough, and sore throat, and even use their pocket handkerchiefs to wipe away the secretion. I have seen this done frequently. As such mistaken sympathy is exceedingly dangerous, I think a notice in the *Journal* to this effect would tend to its discouragement. It is a common saying that, 'There! the cat has got a cold; now it will go through the house;' and, as this remark has been repeatedly verified, it shows how careful people should be to avoid contact with such a mode of contagion. I do not affirm that this was the way in which the disease was contracted, either within or without the palace walls, but I feel sure the habit of kissing pets is a source of danger that should be widely known and prevented."

Electric Light in the New York Post Office.

Five of Maxim's electric lamps have been placed in the post office of this city to light the great room on the ground floor. The lamps are thought to act very well, and as they are hung high the glare is not unpleasant to the eyes. Each lamp gives about 5,000 candle power, and is connected with a dynamic machine of about four horse power. The light is that of the voltaic arc, and French carbons are used. Each carbon or candle will last about five hours, and when burnt out another lamp is swung into position in place of it. The cost of each lamp is estimated at about 3 cents per hour.

A Large Tow.

On the evening of April 20th the towboat Joseph B. Williams left Louisville, Ky., for New Orleans with 36 boats and barges, containing 645,069 bu. coal and 35,000 bu. coke—in all 380,089 bu., equal to 25,213 tons. This is the largest tow ever moved by one steamer on the Western waters, and probably in the world. The tow measured 258 feet in width over all, and with the towboat, 862 feet long. There were nearly 4 acres of black diamonds on the tow. Some idea of the magnitude of the towing service on the Ohio and Mississippi rivers may be formed from the above. H. L. B.