

Miscellaneous.

Medicines and Poisons.

It has been well observed that medicines and poisons differ only in doses, but experience proves that quantity is not the only point of distinction between the two. Recent communications from correspondents respecting the fatal effects of carbolic acid and santonine on dogs, would seem to suggest that the same agents, in precisely the same quantities, applied in exactly the same manner, produce very different effects. But, in justice to the authorities under whose sanction or by whose recommendations certain potent agents are used medicinally, we are bound to call attention to the fact that the ill results always occur in the experience of amateurs. We do not mean that amateur medical experiments always fail, but when a startling discrepancy does present itself between science and practice, the mistake of most of them is invariably in the experience of the non-professional man. These reflections have been forced to us again and again, and once more recently in reference to the action of carbolic acid and santonine.

Take the first agent to begin with. We have used carbolic acid (pure) and the liquid residue (terebene) as a remedy for skin diseases, and for the destruction of parasites, for years without a mishap. A solution of one part in forty parts of water has been employed repeatedly as a dip for the purpose of destroying fleas infesting pet dogs, and the little animals have been immersed in the fluid up to their eyes without injury. Sheep have been dipped in a mixture of one in twenty, and have not suffered in consequence. Further investigation proved that more diluted solutions are equally effectual, but in our early experiments we used them without a single accident.

Cases of fatal results from the employment of carbolic acid mixtures of one in fifty, and even of higher dilution, have been reported on many occasions since carbolic acid came into favor as an anti-parasitic remedy. Some of the cases have been investigated, and in each instance some error has been detected. One of our correspondents admits that the mixture which injured his dog was made by his man, for whose scrupulous care he pledges himself. We confess to the utter absence of any such faith in the conscientious exactitude of men who have the charge of animals generally. On the contrary, we know that there is a wide-spread popular belief in the efficacy of strong doses; if a small quantity of the agent prescribed fails to produce the expected results, a considerable addition will be made to the next dose which is given; and while the attendant's respect for the truth is satisfied by the statement that he gave the exact dose, he does not always feel bound to mention the little addition which he subsequently made on his own responsibility. One candid individual, under whose hands a dog had died after a dressing of carbolic acid mixture, admitted that he found the first dilution which was ordered so beneficial, that he could not resist the temptation to obtain a still more decided advantage by using a much stronger mixture on the following day.

Irrespective, however, of such intentional variations as those to which we have alluded, the strength of a compound may be accidentally altered, owing to some slight change in the conditions which are indispensable to a perfect mixture. Some time ago we had to inquire into the causes of the death of sheep from dipping in a mixture of carbolic acid, which had been used for many weeks previously without accident. In this case very little investigation was required. It was apparent at once that the combination of the active ingredients with the water used to dilute them was imperfect; and, instead of a uniform mixture being produced, the acid separated from the other constituents, and floated on the surface as a brown scum. The first few sheep which were dipped in the fluid were in contact with the undiluted acid, and succumbed accordingly to its energetic action. The addition of a little common soda to the water at once had the effect of causing a perfect and intimate mixture of the carbolic acid with the water, and no more difficulty was experienced. Nevertheless, it is easy to understand that a person using the agent for the first time, with the results above stated, would be inclined to place carbolic acid among the deadly poisons, and to so speak and write of it in future.

In reference to the action of santonine, it is not so easy to explain the different effects which have been observed. But the rule still obtains that the fatal cases have occurred in the experience of amateurs; while professional observers do not record any instances of injury arising from its use.

Quite recently the action of santonine has been tested on three dogs, each of which took a consider-

able dose without suffering any serious inconvenience. One small puppy had five grains to commence with, and, as far as could be seen, without any result. Ten grains given to the same animal on the following day produced the effect. Another dog had ten grains without effect, but another dose of twelve grains was followed by symptoms of cerebral disturbance, which soon passed off. Another dog manifested similar symptoms after a dose of twelve grains; this animal also quickly recovered from the effect of the drug, and is now quite well. These experiments prove that santonine may be safely given to the dog in considerable doses. It is impossible to specify all the conditions which may modify the influence of the medicine and lead to the development of poisonous action. Purity of the agent is the first essential; the dose, it appears, may be varied within certain limits without risk; but a professional man would hesitate to give even a small quantity of santonine to an animal which gave any indications of cerebral derangement. We are strongly inclined to believe that, in the cases referred to by our correspondent of death from a single grain of santonine, there was some radical mistake, which, if detected, would explain the result without reference to santonine at all.—*Field*.

Ironing Sleighs.

A too common error in the ironing of sleighs is the loading of them with scrolls and ornamental iron-work for the purpose of improving their appearance and increasing the strength. So far as the appearance is concerned, the scroll work is not recognized as being of any advantage, while the extra weight imposed fails to add to the durability of the vehicle. The main iron-work should be that of the under side of the beams and knees; the most perfect manner of constructing this is to plate the lower end of the latter a little more than half their length with half round iron of the full width; from the top of this a brace of round iron should be welded on, extending up to the beam to a point about two inches short of the centre; from the point where the brace is attached there should be welded a piece of flat half-oval iron the full width of the knee; this should extend to the top of the latter and be turned with a heavy corner, and should reach to the centre of the beam, and be welded to the brace at its point of contact; this secures a strong brace to the knee and beam. The bottom end of the knee-plate must have the T head to attach it to the runners, but this head should not be less than six inches long, and be secured by four rivets or bolts; the T heads to the front knees should be still longer, the lower branch extending beyond the bend of the runners, with the upper one high enough up to protect the runner from injuries received forward of the knees. The side stays need not be as heavy as they are generally made; as their principal use is to prevent the knees from being drawn forward, they should, in all cases, be perfectly straight, as when bent they have no value as braces over the weight required to bend the iron. The front iron-work for the shafts and jack heads should be as light as possible, the front, under any circumstances, being much more heavily ironed than the other portion, and the tendency to run on the nose thereby increased. The position of the draft-eye is dependent entirely upon the height of knee and bend of runner and shafts, and requires more skill on the part of the blacksmith to properly locate it than any other one thing in connection with the iron-work.—*Carriage Journal*.

A Floral Ornament for Drawing-Rooms.

Last August a lady friend of mine gathered a handful of the world renowned flowers of Forget-me-not (*Myosotis palustris*), and to preserve them as long a period as possible, they were put in a large soup-plate filled with rain water. The flowers were placed near the window, so as to enjoy the advantages resulting from an abundance of light and air, and the water was replenished when needed. In a surprisingly short space of time—three weeks, I believe—white, thread-like roots were emitted from the portion of the flower-stalks in the water, and they ultimately formed a thick net-work over the plate. The flowers remained quite fresh, excepting a few of the most advanced when gathered, and, as soon as the roots began to run in the water, the buds began to expand, to take the place of those which faded, and up to the middle of November the bouquet—if it may be so called—was a dense mass of flowers, and a more beautiful or chaste ornament for the indoor apartment cannot be imagined.—*Thomas W. Tinsley, in Gardener's Magazine*.

English Farming.

The writer of "Ogden Farm Papers" in the *American Agriculturist*, says in reference to English farming—"As a whole, the farming of England is the best in the world. The farms are usually large, and the farmers men of intelligence and of large capital. More attention is paid there than anywhere else to the making of manure; grain is largely grown, and the system of a regular rotation of crops, to maintain the fertility of the soil, is almost universal. Over a large part of the country the cash profit of farming is secured by the sale of grain, but the fertility of the land, the ability to produce grain, is kept up by the feeding of a heavy stock of cattle or sheep, which are kept mainly for the sake of the manure they make and which are largely fed on purchased food—in great part oil-cake and Indian corn imported from America. Such a complete system could hardly be carried out on so large a scale on many farms in this country, for few of our farmers have the necessary capital, but it is, after all, the system toward which we should work and to which we must look for the permanent future of our agriculture. Our farming can never be perfect, nor anything like it, until we shall have reached the point of a constant improvement of the soil. A constant deterioration has been a necessary consequence of the rapid spread of population over the whole breadth of the land, but it must before long be followed by a wave of better farming, which alone can enable such a population to be self-supporting. Happily the improvement already made on farms at the East which were considered to have been exhausted, shows that the injury was not deep, and that the pioneers who have been tempted westward by a virgin soil have left behind them a fair field for the establishment of the better agriculture that an older and denser community demands and makes possible.

How to Succeed.

The young man who thinks he can carry his boyish pranks into the serious business of life is not a man, and defrauds himself and his employer. "After work, play." That should satisfy the most sanguine. "Business before pleasure," is the motto of the prudent man whose guide is experience, and it is sufficient for the novice in active life.

But it is despicable to see the young man just starting in life so wedded to his former enjoyments as to place them above present duties. Yet this is often the case. The young man, who, to steer his own bark, launches forth on the sea of life, too often looks back on the pleasures he leaves behind, and, forgetful of present duties, steers back to past enjoyments. There is no royal road to success any more than to knowledge. He who would succeed must work; and after all there is more real enjoyment in work, which has a worthy object, than in play or pleasure, intended to kill time. We remarked a few days ago to a business man whose present means are amply sufficient, but who worked really harder than any of his numerous employees, that he ought to "take it easy." Said he: "I am never so happy as when I have more than I can do. I may wear out in working, but I dread to rust out in idling." He was right. His work was a part of himself, a part of his life, and it was always faithfully done. To apprentices, especially, this earnestness and interest in their work is necessary, if success is ever to be attained.

WASTE LANDS IN IRELAND.—*Saunders', Freeman, Belfast Newsletter*, and other Irish contemporaries, liberal, and conservative, advocate the improvement of the waste lands of Ireland, by the Government purchasing, draining, road-making, and then selling, or leasing in lots. They say that out of four and a half millions of acres of waste lands—bogs, moors, swamps, and heather, at least two millions would be improveable, and that the average annual value of these would be one shilling per acre, or, if purchased by the State, the cost would be about thirty shillings. The reasons they give for State interference, and purchase, are that the estates are very large; that since 1845, Government has offered loans, repayable in twenty-two years, principal, and interest, at 6½ per cent., and in thirty-five years at 5 per cent., to induce the proprietors to improve, which they have not done; that when Acts of Parliament enable railways to acquire land when wanted for the public interest, so should they with waste lands, when the owners are unwilling to do their duty. We still think many would be willing to sell to the State. The surplus church funds would be sufficient for these, and other Irish reproductive works. If our Government requires an example, the Netherlands have set it in the drainage, reclamation, and improvement of Haarlem Mere, which they afterwards sold in estates of 40, up to 600 acres.