

SHEPHERD'S DOG.

By shepherd's dog, is meant a breed of dogs which the shepherds of Europe have with them, and which are trained to assist them in driving their sheep and in guarding them from the attacks of wild animals, and of other dogs.

There is the large Spanish dog, which is strong, active and can grapple with a wolf or a bear; and there is the smooth, light, delicate limbed shepherd's dog, from England; and there is the rough, the rough, shaggy English shepherd's dog, many of which come into the world tailless.

London, in speaking of this breed of dogs, says: "The English sheep dog is usually larger than the northern, is larger on the legs, and has been so long accustomed to have the tail taken off the rump, that in some instances the custom has operated on nature, and these dogs are sometimes puppid tailless. The shepherd's dog is not, however, usually bred so large as the real cattle or drover's dog, but is yet sufficiently strong and fierce."

He also observes, that "the shepherd's dogs of Scotland are varied in form & size, but are all of them usually smaller than those in use in England; they are nevertheless, without competitors in sagacity and excellence." Their general characteristics are, ears partially upright, head rather pointed, shaggy coat, and a remarkable vivacity or fullness of tail.

In driving a number of sheep any distance, a well trained dog never fails to confine the sheep to the road; he watches every avenue that leads from it, where he takes his stand, threatening every delinquent; and presses the stragglers, forcing them into the ranks, without doing them any injury. And if the shepherd is at any time absent, he rests satisfied, knowing his dog will not abandon his charge, but will keep them, the moment he returns, the sagacious animal gives up the trust, or conducts them to his master, according to the word or signal given.

Mr. James L. Coleman, near this city, has both male and female dogs, of which the above picture is a good likeness that are well bred to the care of sheep. They of their parents were imported by Major Twigg, and would be very valuable to one engaged in sheep husbandry.—Southern Cult.

LIVE APPLE TREE POSTS.

The Massachusetts Ploughman, suggests that apple trees be planted about ten feet apart, on a line where it is desired to construct a permanent fence. In the course of ten or twelve years they would be large enough to be mortised for the purpose of receiving cedar or chestnut rails, which, it is thought, would last more than fifty years. In the meantime these living fence posts would occasionally bear a crop of apples, and thus become profitable in all ways.

Agricultural Products of the United States and France.

A writer in the English Agricultural Gazette makes an interesting comparison of the products of the United States compared with those of France. The population of the United States is set down at twenty millions and that of France at thirty-five millions. The proportion of the agricultural population in America is given as 80 per cent, commercial 2.5, and manufacturing 17.1. The writer observes that the agricultural production of the United States, compared with its inhabitants, is enormous, viz:

Table with 2 columns: Product, Quantity. Includes Wheat, Barley, Oats, Rye, Indian Corn, Buckwheat.

He also contrasts the grain crops of the two countries, showing the comparative amounts produced of each kind, in hectolitres, as follows:

Table with 2 columns: Product, United States, France. Includes Wheat, Barley, Oats, Rye, Indian Corn, Buckwheat.

"The United States," says the writer "produce annually 70,000 tons of wool, 600 tons of hops, 300 tons of beeswax, 10,000,000 tons of hay, 95,000 tons of hemp and flax, 100,000 tons of tobacco, 40,000 tons of rice, 395,000 tons of cotton, 60,000 lbs. of cocoons of silk-worms, 77,000 tons of sugar, and 5,000 hectolitres of wine. The produce of the farm-yard, or cow-house, is estimated at \$7,000,000 (\$35,000,000) forests, \$2,720,000." The total amount of agricultural products amounts yearly to the enormous sum of \$138,730,160 sterling, or \$693,650,800.

SAVING CLOVER SEED.

A correspondent of the American Farmer gives the following method for saving clover seed, and account of the "stripper," a machine used, in some northern districts for that purpose.

"My plan is, when it is fully ripe, to take a common grain cradle and lower the first finger as close to the scythes as can be at the point, and then take a linen cloth stretch it to the two lower fingers, and then you will cradle two swathes together; by this plan you will cut the tops, or more if you wish, and by keeping your scythe in order you can cut it very clean; and any hand that can mow grass can also cut clover seed. After it is cut you will let it lay one or two weeks to season; in dry weather it may lay a long time; and when it is well seasoned, you will gather it in small heaps with a common hand rake in the morning, when the dew is on, otherwise it will shell; then it can be removed in the afternoon of the day, or may remain for some time in dry weather—you will then haul it to the barn or stack-yard, if you wish to stack it—my plan is to stack it 25 by 12 feet in length and breadth, and about 10 feet high, I then take long straw, and lay it with top ends out, to project half its length over, and then build on and batten in to close the stack—every load a course of straw, and so on gradually with straw and seed, till you bring it to a point—the gable end I generally build perpendicular, then cover the top well with straw and heavy poles, and by the first rain, beat down the straw with your rake, and you will have a complete stack that will stand the storm till you have time to thrash it. You may thrash it on a common spike machine, by having a good shaker to it, but I generally thrash it off with the flail in the winter—shake off the straw with hand forks, and rake in clean with hand rake; the better it is raked the easier it will clean on the common spike machine. I have cleaned as high as 18 bushels of seed per day with six horses in the short days of winter.

I will now conclude by telling you about the clover seed "stripper," as it is termed by us, to which your correspondent refers, as being "shaped like a comb, and dragged by a horse." We have several kinds in our county—some run on sled runners, and others on wheels—they are not made by any particular manufacturer, but generally by farmers themselves, according to their own plan—but in my opinion, they are not calculated for large farmers or for getting seed for market at these low prices; for they are too laborious in working, and they require a large barn floor for drying it before you can store it away, otherwise it will heat and must, and injure the seed, and cannot be thrashed clear; and therefore I will submit the above to your consideration, as also the results of the trial of my neighbor Diehl. Some years ago I and I went some miles and borrowed a clover stripper, with the intention, if it answered the purpose, to get one made in company. Mr. D. stripped four acres and sent for me to see it work—I mounted the machine, and took the chair, when he handed me the scraper to scrape off the clover heads, and told his boy to move on slowly; but I tell you it soon raised the oil my seat, and it took all my power to clean, and made the sweat roll in streams, for my neighbor was determined to make me go one round for trial—but that round put me

out of the notion of going into a partnership for any more stripping of clover seed.

good land; for like most vegetable productions it thrives best in rich land—and from such land the quantity of straw produced is almost incredible.

Profitable Disposition of a Dead Horse.—Falkner says, that the carcass of a dead horse, which is often suffered to pollute the air with its noxious effluvia, has been happily employed in decomposing 20 tons of peat earth, and transforming it into the most enriching manure.

Now, where peat is not to be had, earth of any kind may be substituted, in its stead, with the best effects.

IRRIGATION.

Irrigation has been practised by the Chinese and Egyptians from the remotest antiquity. In countries where rains seldom fall, and the ground becomes dry and parched, irrigation, is of immense value. It consists in taking water from lakes, sewers, running streams or reservoirs, and causing it to flow over the land by means of small canals or furrows, then by proper outlets to carry it off again. It is confined, according to Colman and Johnston, almost exclusively to meadow lands.

The benefits of irrigation in a country where rain falls frequently and abundantly, are the same as those of manuring. When the water used holds in suspension any organic matters, they subside while on the fields, and leave a visible layer of manure on the surface, after the water is drained off. An example of the fertilizing effects of irrigation is seen along the banks of the Nile and Ganges. But the effects of irrigation with water that contains no organic sediments, must be considered the same as that of rains. Running water furnishes to plants some gases, which are absorbed, and in this way are beneficial. Crops of young and tender plants should be irrigated by pure water; it may be repeated every two or three weeks when there is any want of rain; and the water be allowed to lie on the field three or four days. It is thought by English agriculturists to be injurious to meadows to flood them immediately after mowing.

Warping is a process similar to irrigation: the object of this, however, is more especially to obtain the sediments of muddy streams, &c. The water should never be allowed in either process to remain on the field until stagnated. Irrigation is most beneficial on land which is well drained beneath, so as to allow the water to penetrate the subsoil, and not stand too long on the surface. Meadow lands are sometimes watered in the winter, to prevent the injurious effects of frost upon the roots of the grass. Irrigation is not practiced to much extent in the United States; and the remoteness of many farms from streams, as well as the expense attending the operation, will prevent its universal application, even where it would be beneficial.

M. M. RODGERS.

TEA, COFFEE AND TOBACCO.

Professor W. Parker, of the New York College of Physicians and Surgeons, at a recent chemical lecture, examined a man who was troubled with palpitation of the heart. The report states that no physical signs of organic disease of the heart could be detected, and hence we may conclude, says Prof. C., with much certainty, that all the cardiac disturbances are purely functional, depending on derangement of the digestive organs—and this organ depending on the free use of tobacco, tea and coffee and confinement within doors. What then are the indications of treatment? Shall we give physic in such a case? Will physic cure bad habits? Not a bit of it. Let the patient simply throw away his tobacco, his tea and his coffee, adopt a plain, wholesome diet, and take regular exercise in the open air, & he'll soon be well; in a word, remove the causes of derangement and the effects will cease.

THE PINE DISTEMPER.

The Mobile Herald says that the disease which is destroying the pine forests of the Carolinas, has made its appearance in Baldwin Co., Ala. It exhibits some singular phenomena. Occasionally it proceeds in a straight line, destroying not only the tall grown trees but the small shoots just springing up. Then again it goes into circles, leaving trees in the intermediate spaces sound and vigorous. The trees die just as though they had been girdled; the leaves wither and fall off, and the trunk soon rots to decay. Our informant does not attribute the cause of this

strange distemper to worms. The only one seen about it is the common one peculiar to the pine trees. His impression is that the cause is entirely an atmospheric one.

POISONOUS CLAMS.

We have seen accounts lately of people having lost their lives in various places along our coast, says N. Y. S. American, from eating clams. It appears to us that there is not sufficient data to found reasonable conclusions regarding the clams being the direct cause of these deaths. Some accounts, plain and unvarnished, are required. One account says that these poisonous clams have all been found to have a small black leech within them. If this is the case it argues that the clams were a la morie.

HARDENING HIDES.

The following patented process for hardening hides extracted from Examiner Page's Report, will be found to be not a little interesting. The hide is hardened and rendered transparent as horn.

In the first place they are submitted to the sweating operation or the lining for removing the hair. They are then submitted to the action of powerful astringents, such as sulphuric acid, alum or salts of tartar dissolved in water at a high temperature. During the operation of clearing the hides of oil, they are rubbed, or friction is applied, a very convenient way, whereby the hide becomes thickened, and after this process is finished they are rinsed in warm water and dried. After being dried they are submitted to the action of boiling linseed, or any other drying oil, &c. retained in the hot oil until a yellow scum appears on the surface of the hides, when they are withdrawn. It is desired to impart color to the material, as staining it in imitation of tortoise shell, it is done while in the oil bath, and when removed from the bath it is submitted to pressure in moulds for the formation of various articles, as knife handles, &c. For the article, when it comes out from the oil bath is very soft and pliable, but when allowed to cool, it becomes hard and susceptible of a high polish.

MODEL POTATO GARDEN.

The following account of a model potato garden, described by the London Gardener's Chronicle will be found to be very interesting and instructive, and will, no doubt, be attentively read by all our subscribers.

The Model Potato Garden, at Solingen, not far from Elberfeld, in Rhineland Prussia, is one of the curiosities best worth seeing in that interesting manufacturing district. It has been established by that indefatigable struggler against the difficulties of the times, M. Peter Knecht, whose ardor in the cause of the poor was, on this occasion stimulated by family recollections, as his grandfather of the same name brought the first potatoes into the district of Solingen, in 1731, from Nantes, in France. The garden is about two English acres in size, divided into beds and borders by a broad gravel walk, which runs in the figure of a square. The experiment beds are carried in parallel sections across the centre plot, running north and south; and they also occupy some of the borders. The land has not been drained but the high position, and dry nature of the climate in summer, would seem to render that precaution here superfluous. Great care is taken in turning over the ground, and pulverizing it as much as possible. An alternation with vegetable crops is also observed. The manure chiefly composed of house refuse, well mixed with clay and gypsum, to fix the ammonia, is turned over frequently during the winter, and when it is spread upon the land, is mixed with quick lime, which again disengages the ammonia. With this compost, ashes of wood, burnt clay, all other substances calculated to loosen the soil, may be mixed. When the soil is thus prepared, dissolved in sulphuric acid and water. Fresh stable-dung, and bone dust have been found by the experience of the gardeners not to be good manure for potatoes. A compost well turned over, thoroughly decayed and mixed, ensures a sound, and full sized root. The selection of the seed is also very essential. Not only should the soil be changed, but care should be taken to choose only the healthiest roots, which have been well wintered, and, if possible, grown in ground that was not dugged. The selection should be made in the autumn and the seed potatoes kept on moderate sized deal boxes, in a dry cellar. Amongst the potatoes in the garden there are some with very short haulm, that are planted in rows 1-2 feet from each other; the long-haulm kinds are in rows 2-3 feet asunder. The average produce of the neighborhood is

stated to be, in good years, 80 pounds on the rod of 16 square feet, which is more than ten tons to the English acre. What the crop in the garden averages has not been ascertained, as the kinds grown are very numerous and very various in yield. Nearly 500 kinds of potatoes from all parts of the world have been tried in this as a nursery for the neighborhood, or is sent to those who know its value, even at a great distance.

In the bad season of 1844, when there was a total failure in that part of the continent, the following sorts produced in small quantity, but preserving their quality:—A small early potato (from Dartur, in Upper Egypt); the large yellow Malta; the large white Chili (from seed); a white potato from Intermedios, Central America, (from seed); a red potato from California; a dark red from Porto Allegro, La Plata, South America; the large black sage potato from Nukahiva, New Zealand, said to be improved in New Zealand from the Arancaha of Peru; a white potato from Nova Scotia; and a long white from Canada (partially damaged). M. Knecht particularly renewing the stock from American seed. Chili, Peru, and Porto Allegro, between Monte Video and Buenos Ayres, he pointed out as the best sources; but praised the orange tawny potato of Java, and especially large black, New Zealand potato, which is both mealy and highly productive.

VEGETABLE INSTINCT.

Of all the plants, the coniferous alone possess the power of locomotion, properly so called; and perhaps of all plants they alone consist of solitary individuals. Other plants are composed of communities, the beds being the inhabitants, the stems consisting of store rooms and galleries, the little spongy bodies at the extremities of the roots being the true locomotive organs—the honey bees of the hive, collecting and elaborating the sustenance of the body politic; and if you expect trees to dance, heron-pipes for your diversion, you must get some city or beach, to set them the example. But if trees, as a whole, do not walk upon the surface of the earth, they in other respects exhibit abundant instances of spontaneous motion. For example, the tendency of plants to incline their stems and turn the upper surface of their leaves to the light, the direction which the extreme fibres of the roots will often take to escape from light, or to reach the best nourishment; the folding up of the flower on the approach of rain; the rising and falling of the water lily; and the peculiar and invariable direction assumed by the twining stem in ascending its support. If a pan of water be placed within six inches on either side of the stem of a young pumpkin or vegetable marrow, it will in the course of the night approach it, and will be found in the morning with one of its leaves falling on the water. This experiment may be continued nightly until the plant begins to fruit.

If a prop be placed within six inches of a young convolvulus, or scarlet runner, it will find it, although the prop may be shrouded daily. If after it has twined some distance up the prop it be unbound and twisted in an opposite direction, it will return to its original position, or die in the attempt; yet notwithstanding, if two of these plants grow near each other, and have no stake around which they can twine, one of them will alter the direction of spiral, and they will twine round each other. Dohme placed some kidney beans in a cylinder of moist earth, after a short time they commenced to get minute, of course sending the plants upwards to the light, and the root down into the soil. After a few days the cylinder was turned one fourth round, and again and again this was repeated, until an entire revolution of the cylinder had been completed. The beans were then taken out of the earth, and it was found that the stems and the little tendrils had bent to accommodate themselves to every revolution, and the one in its effort to ascend perpendicularly, and the other to descend, they had formed a perfect spiral. But, although the natural tendency of the roots is downwards, if the soil beneath be dry, and any damp substance be placed above, the roots will ascend to reach it.

A tree growing from an old wall, or cleft of a rock, will, as soon as it has exhausted the surrounding soil, send a stem down to the land beneath; and Stephens, in his search among ruins in Central America, found, he tells us, magnificent trees of a great height and size, upon the top of some of the high walls of the deserted edifices of a lost race, which having sent stems down to the soil on each side formed by this means a firm support, and being thus, as it were, strapped together with living

cables they remain to this day in their original form.

The plants in a bathhouse do not direct their leaves to the stove, in quest of heat, or the open door in quest of air, but to the sun in quest of light.

Plants in a cellar or dark room struggle towards the light, plants in an "meadow" turn the upper surface of their leaves towards it, or the contrary, their roots sedulously avoid it.

The tendrils of a vine, or the stem of a creeping plant, never makes any turn until it comes in contact with some object around which it can entwine; after which it produces in a spiral direction around the object held in its embrace.

The strawberry plant will thrust its runners completely across a garden walk on to a bed of soil on the opposite side, where it will, for the first time, as it were perceiving its object to be gained, push out roots, and form a new plant.

TURNS.

The Pantheist, a native of the Isle of France, sends out roots from the stem for support. It is true, he says, one side of the root is attached to the trunk, and roots at some distance above the rest of the main stem, which reach the earth, and form supports to the trunk perfectly analogous to the shores and timber work used by architect to prop a building in danger of falling.

Preparation and sowing of the seed. Sowing your seed in soil oil for 24 hours, then drain off the oil, and mix with a quantity of ashes with the seed, not only to separate them, but to enable you to distribute them evenly over the ground. Sow them, then harrow them in lightly, and roll the ground with a roller.

Plain common sense farmers, who make all that they and their families consume, and often get rich in the bargain, by the proper use of purchased fertilizers, don't pay so much for the labor, as to make land cost more than it comes to. True, one can buy gold too dear, or manure of any kind. Such is not our system. Three dollars worth of manure or fertilizer of any kind per acre in field culture, is as high as we have ever recommended.

Southern Cultivator.

Gen. Taylor was invited by the proprietors of the Crescent City steamer to take a trip on board of her to New York, which he has declined, saying: "My official duties will compel me to forgo the gratification it would have afforded me to accept your kind invitation, as well as to have met, on so favorable an occasion, my friends and fellow citizens of the great metropolis of our country."

Green W. Caldwell has been nominated as the Democratic Elector in the 9th District. The Albany Journal says: "The great principle upon which we have been, is sustaining Cass as South Carolina president, when he says he prays for the abolition of slavery every where."