

ABOUT THE SUNFLOWER.

Some few weeks ago we were sitting with some "old reliable" farmers, talking over different methods of farming and new crops. The conversation turned to the subject of sunflower culture for stock and poultry feeding, and we concluded to give our readers a few remarks on the subject.

"The seeds of both the common and dwarf sunflower yield an oil little inferior to that of the olive for domestic purposes," says Lawson, so thus at the outset of our researches we come on a valuable use for this plant. In Portugal, we find that the seeds are made into bread, as also into a kind of meal: and here in America they have been roasted and used as a substitute for coffee. The greatest objection to the cultivation of sunflowers is that they require very superior soil and are a most impoverishing crop, particularly the taller growing sort (*Helianthus annuus*), from which circumstance the dwarf species (*Helianthus Indicus*) has been preferred by some cultivators, specially in France, who assert that as its dwarf habit of growth admits of a greater number of plants being grown on a given space, it is not so much inferior to the other in quantity of produce as, from its appearance, one would be led to expect. In addition to the uses above mentioned, some French authors assert that the leaves, either in a green or dried state, form excellent food for cows, and that they are greedily eaten by them. The stems also are valuable for fuel, and indeed are used for that purpose in some vicinities.

Sunflowers are best cultivated in hills, like field corn, but may also be used to fill up odd corners, and in time may attract more attention as a field crop than they do at present.

HARVESTING.

When the stem and discs of the sunflower become withered, and the seeds shining and dark coloured, the plant is ready to be harvested. It may be simply pulled if weak, but out west here those we have seen would better be attacked by an axe, as in tree felling, or a good, heavy, sharp corn-knife will answer the purpose. The discs are afterwards cut off with a sharp knife and the seeds rubbed out.

Lawson says that from thirty to forty bushels of seed on one acre is a fair crop of sunflower. These will yield fifty gallons of oil, the refuse will make 1,500 pounds of oil cake, and the stalks burned into ash will afford one-half ton of potash. Professor Johnston mentions that the seed yields fifteen per cent. of oil.

COMPOSITION.

The analysis of sunflower seed and cake compared with flaxseed meal and cake is as follows:

	Water.	Albuminoids.	Fats.	Carb. Hydr's.	Ash.
Seed.....	8.0	13.0	21.0	7.7	3.0
Cake.....	10.0	34.2	11.0	17.0	10.6
Flaxseed meal.....	9.7	34.2	3.9	29.3	7.3
Flaxseed cake.....	11.7	28.3	9.0	29.0	7.7

In order that our readers may fully comprehend the value of the above analysis and form for themselves a comparison between the two seeds given, we shall explain the uses in feeding of the different component parts mentioned.

Water—Is absolutely necessary as a vehicle of plant food and for carrying on the vital processes.

Albuminoids—Nitrogenous matters which go to form the flesh of animals, also gelatinoids and some of the fat, 100 parts albumen yielding 51.4 of fat. By combustion in the animal body these yield heat and mechanical force, repair waste of nitrogenous tissue and supply in themselves most of the requirements of the animal.

Fats—Go to form fat in the body, but may change into a different kind; they are burned in

respiration to give heat and mechanical force, and thus are "fat formers" and "heat givers"; one of fat equals 2.44 of starch in food value.

Carbohydrates—Include starch, sugar, gum, dextrine, mucilage, etc., and are more immediately used for heat and mechanical work, but if taken in excess they are laid up as fat. They form the largest part of all vegetables.

Ash—The combustible or mineral part of plants or foods, consisting mostly of salts and going to form bone, blood, etc., in the animal.

From the above it will be readily seen that sunflower seed and cake is quite a valuable feeding stuff, deserving of trial by all stockmen.

We shall welcome any experience which our readers can give regarding the cultivation, yield or value as a feeding stuff.—*Farmers' Review*.

HOW TO TAN SHEEPSKINS.

To those who occasionally kill a sheep, we would say remember the following recipe for tanning a sheepskin. They make the best kind of mats for the house or carriage, and a good Cots-wold skin well tanned makes a good cushion for the waggon-seat, and for many uses it is valuable:

"For mats, take two long-wool skins and make a strong suide, using hot water; when it is cold wash the skins in it, carefully squeezing them between the hands to get the dirt out of the wool, then wash the soap out with cold, clear water. Then dissolve alum and salt, each a half pound, with a little hot water, sufficient to cover the skins, and let them soak in it over night for twelve hours; then hang over a pail to drain. When they are well drained, spread or stretch carefully over a board to dry. When a little damp, have one ounce of saltpetre pulverized, and sprinkle on the flesh side of each skin, rubbing in well; then lay the flesh sides together, and hang in the shade for two or three days, turning the under skin uppermost every day until perfectly dry, then scrape the flesh side with a blunt knife to remove any remaining scraps of flesh. Trim off projecting points; rub the flesh side with the hands, and it will be very white and handsome, suitable for a door or carriage mat. They also make good mittens. Lambskins, or even sheepskins, if the wool be trimmed off evenly to a-half or three-fourths of an inch long, make beautiful and warm mittens for ladies or gentlemen, and the girls with a little practice can make them."

IMPROVING SOILS.

In this country there are chiefly two kinds of bad land for the farmer to fight. One is the stiff, wet clay soil. The other is the light, dry, sandy soil. The first bakes and becomes too hard and brick-like for the roots of plants to enter. What the second is like was described a long time ago in the parable of the sower. The seed sprouted and sprang up quickly, but when the sun came it withered the plants, they dried and that was the end of them. The sandy soil dries out quickly, and roots cannot be firmly fixed therein. Of the two bad soils, clay and sand, the sand is the hardest to improve. Rather strangely, however, the remedy is the same in both instances. It is red clover. At least red clover is better than anything else. It should be harvested when in bloom. The second crop should be ploughed under, green, in the fall. Good soil is made up of clay, sand and loam, or decayed vegetable matter. The strong, tough clover roots wedge themselves into the clay and make it loose and friable. On the other hand, the same strong, tough roots compact the loose sand, hold it together and keep moisture from drying out.

Deep, rich soils and top dressing are the remedies for drought.

HOUSEHOLD HINTS.

As we stated before, dry salt is as good as any material that can be used for preserving eggs. Pack in boxes, turning the boxes twice a week, in order to prevent the yolks from setting to the inner sides of the shells.

It will be a great deal cheaper to buy a few good books for the young folks, and subscribe for a paper or two to please them, than to allow them to corrupt their minds reading the trash, and worse than trash, that is being so widely scattered.

EXCELLENT bronchial troches may be composed as follows: Powdered extract of licorice, sixteen ounces; powdered sugar, twenty-four ounces; cubebs, gum-arabic, of each four ounces; extract of conium, one ounce. Mix, and with sufficient water make troches of suitable size.

A BREAD crumb omelet is excellent if served with roast lamb or veal; one pint of bread crumbs, a large spoonful of parsley, rubbed very fine, half of a tiny onion chopped fine. Beat two eggs light, add a teacupful of milk, a trace of nutmeg and pepper and salt liberally, also a lump of butter the size of a small egg. Mix all together and bake in a slow oven on a buttered pie plate; when light brown turn it out of the plate and serve at once.

A PLAIN junket is made by warming two quarts of fresh milk until very little warmer than when just from the cow; pour the milk into a large ornamental bowl or dish in which it can be brought to the table, and while the milk is warm, stir into it two tablespoonfuls of prepared rennet; stir gently for two minutes, then set away in a cold place. It will soon become a solid, sweet curd. Serve by dipping the curd out in large slices with a small, flat ladle or broad spoon. It may be eaten with rich cream alone, or with cream and powdered sugar.

At a recent lecture delivered in London on "Bad Food and its Detection," it was asserted that the lactometer is useless, and no advantage to the consumer at least. Fat being lighter than water, a rich milk might appear watered by this test and tricks of the milk trade be thus fostered by its use; and, as the importance of purity in milk cannot be overestimated, the fact remains that the only method known by which it can be satisfactorily tested is that of complete analysis. A simple but infallible test for alum in flour was shown by the lecturer. On a portion of adulterated flour being placed in a small quantity of chloroform the flour floats, while the alum or other mineral matter sinks to the bottom; so also, in a similar way, alum in bread may be instantly detected by placing a small piece of the suspected loaf in a solution of dogwood and ammonia—the bread turning blue if any alum be contained in it.

THERE is every indication that for autumn wear the rougher class of materials will be much more worn than the finer cloths that have so long been popular. The majority of these gowns are now made with vests, and when they are of a contrasting colour the effect is very good. Tailor-cut costumes, all of woollen material, are, however, somewhat more elegant than they were in the spring. The latest models are of cashmere, serge, or light cloth, quite plain, and in dark shades of colour, the skirt round, and pleated with a very short draped puff; but the tunic, which is a mere tablier of the same material, draped a little on the left side, is trimmed with a deep border in braid work over a netted ground, embroidered with gold and with a few metallic beads; the short bodice with small basque opens with two revers over a vest covered with braid work; this pattern is very simple, but extremely elegant, and can be made in any colour.