

he would have met with success, with time and practice; but courage and perseverance failed him.

The conditions of success in farming are quite as complex as in any other calling. No lazy, listless man, who dreads the drudgery of thinking and working, can ever become a successful farmer. Neither will a mere acquaintance with the ideas and practices of our best progressive farmers warrant success. There must be practical experience on the farm, some degree of practical work, and constant oversight and attendance by the owner. Many failures result from the lack of this, especially with men who disdain to learn the ways of common every-day farmers, in the assurance that they can do as well or a great deal better. This is a great mistake. If anything needs improving, a first requisite is to understand thoroughly its methods and management. A man who wishes to become a superior farmer must first learn how to be a good common farmer; until this is learned, it is best at first to attempt no innovations on the established ways of the neighbourhood. Undoubtedly improvements are possible, but it is better to let them be suggested by practical experience. This may possibly not accord with the ideas of "young American" progress, but it will be sure, and may save a mortifying failure. Having become a common farmer, there is more hope that one may become a superior farmer. Thought, economy and work will usually make success pretty certain. Work is only the fulfilling of the original decree passed upon man; trying to avoid it is one cause of hard times and failure, when we all work and economize to the best of our ability, we shall be a happier and more prosperous community.—*W. H. White, in Country Gentleman.*

FARMERS' HOURS OF LABOR.

If the farmer could complete his labors by working ten hours a day, he would have more time for reading, investigation and thought, and thus he would be better prepared to direct his labor in a manner to secure the largest return possible. He who works from daylight until dark has but little time and no disposition to read much, and therefore is very likely to fall behind the times, and to direct his labour in a manner that fails to secure the best results.

There are but few, if any occupations, that more surely pay for the time spent in thoughtful reading and investigation than farming; therefore he who spends so many hours at work on the farm that there is no time left for study, is wearing out his physical energies to a great disadvantage.

Some farmers have learned that less work and more thought secures larger returns at the end of the year. An intelligent farmer with his eyes open cannot visit other intelligent farmers without learning something to his advantage so great that it will more than pay for the time and expense of the visit. Farmers should be quite as independent as those who follow other occupations, and should not feel that they are obliged to work so many hours that there is no time for social enjoyment or intellectual improvement.

If it is true, as it is asserted, that it has been found by actual test that in many occupa-

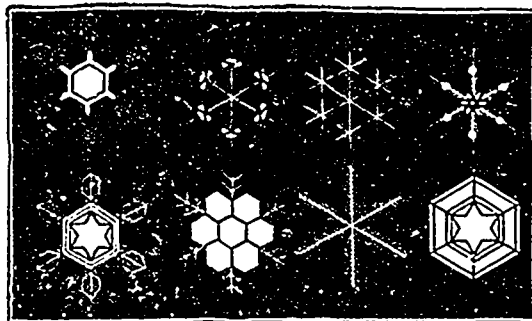
tions the laborer can perform more work in a year by working ten hours a day than he can by working sixteen, there can be little doubt that it would be better for the farmer to work ten hours, and occupy three of the six hours in reading, investigation and thought, on subjects relating to the production of crops.

With the many improved machines which have been introduced on the farm during the last few years, there is no danger but the farmer can greatly reduce the hours of labour, and still obtain a larger product from his farm than he formerly did.

The reduction of the hours of labor will not only give the farmer more time for moral, social and intellectual improvement, but it will make his calling more respected, and will keep a larger portion of the boys on the farm.—*Massachusetts Ploughman.*

THE SNOW FLAKE.

There are a great variety of forms in the snow-flake, although nearly all of them, in some respects, resemble a star. The figure below, from Muller, shows a few of the flakes or crystals, all of which belong to the hexagonal system. They vary greatly in appearance, and would furnish good patterns for embroidery. Indeed we believe, most persons observing the cut without the accompanying explanations, would refer it to the ladies'



department as figures for lace-work, much sooner than to the department of Natural Philosophy. The crystallization of liquids is a curious phenomenon, and the forms of beauty thus produced are by no means limited to snow. The frost work on the window panes surpasses all the works of art, and the salts, shooting into crystals under the microscope, have captivated many a young philosopher. Snow is a thing of infinite utility as well as beauty. Its non-conducting properties serve to retain the caloric of the earth, and prevent the frost from penetrating to a destructive depth. It wraps mother earth in its fleecy mantle, and cherishes within her bosom that spark of vital warmth which at the opening of spring starts the slumbering vegetation, into renewed life. Without a depth of snow to protect the earth, many countries, which now sustain a vigorous population, would forever remain regions of frost and desolation.

STABLE FLOORS.

As winter is at hand, farmers need to look well to their stable floors. Years ago a clay floor was adhered to by some, and such was the earnestness of its advocates and the many arguments brought to bear upon it, that we were induced, says the *Germantown Telegraph*, some twenty years ago to try it. In three or four months we had the planks back again, being satisfied of the disadvantage of clay for

this purpose. Our present floor of plank is simply inclined a little from front to rear, where the usual gutter is made to carry off the liquid voidings. We do not believe in sand, coal, ashes, sawdust, asphaltum, flags, cobblestones, or any of these modern devices to injure horses. Thus far we have never noticed that this little inclination was any way injurious, and we doubt whether the wooden gratings that we frequently see placed over the planking that some use, would be advisable, on the ground that the animal would be no more comfortable, while this movable grating or second floor might lead to accidents. When a person can keep horses in good, sound, healthy condition from five to seven years, as we have done on a carefully constructed plank flooring inclining a little to the rear, it is just as well to be satisfied with it. Do what one will, holes will be dug by the stamping of the feet in the clay, and these will be filled with the moisture, which will necessarily result in scratches, quarter-crack, etc. If the clay is levelled off and beaten down daily, it will make no difference. Some time ago we inspected a number of stables where many horses were kept, and we encountered only one which was composed of anything but wood.

WHY SOME FARMERS FAIL.

They are not active and industrious.
They are slothful in everything.
They do not keep up with improvements.
They are wedded to old methods.
They give no attention to details.
They think small things not important.
They take no pleasure in their work.
They regard labour as a misfortune.
They weigh and measure stingily.
They are wasteful and improvident.
They let their gates sag and fall down.
They will not make compost.
They let their fowls roost in the trees.
They have no shelter for stocks.
They do not curry their horses.
They leave their ploughs in the field.
They hang their harness in the dust.
They put off greasing the waggon.
They starve the calf and milk the cow.
They don't know the best is the cheapest.
They have no method or system.
They have no ears for home enterprise.
They see no good in a new thing.
They never use paint on the farm.
They prop the barn door with a rail.
They milk the cows late in the day.
They have no time to do things well.
They don't believe in rotation of crops.
They do not read the best books and newspapers.—*Southern Farmer's Monthly.*

A GOOD PASTURE.

The value of a pasture consists, first in a close, strong sward. To have this, the soil must be firm, fertile, and filled with moisture. By this we do not mean that it shall be wet; on the contrary, it must be the reverse. The moisture must be such as is held naturally (mechanically), not the moisture of saturation, but that of vaporization. Thus a permanent pasture should never be heavily cropped, until it is well set. Hence none of the tuberous rooted grasses, like timothy, are suitable to permanent pastures. They cannot stand close cropping nor constant tramping. Pasture grasses, therefore, must be the fibrous and deep-rooted varieties.