



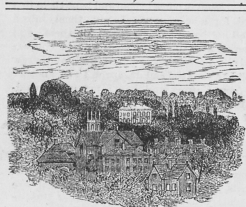
Vol. XLII. No. 1686.

NEW YORK, MAY 20, 1882.

PRICE FIVE CENTS,
\$2.00 PER YEAR.

(Entered according to Act of Congress, in the year 1882, by the Rural New-Yorker, in the office of the Librarian of Congress at Washington.)

Biographical.



BIRTH PLACE OF DARWIN.—FIG. 144.

CUR PORTRAIT GALLERY.

CHARLES ROBERT DARWIN.

CHARLES ROBERT DARWIN, the great English naturalist and author, was born at The Mount, Shrewsbury, on February 12, 1809, and died on April 19 last, in his 74th year. He was the son of Dr. Charles Waring Darwin, and a grandson of Erasmus Darwin, the physiologist and poet, author of the "Botanic Garden," "Philosophy of Agriculture and Gardening," and several other works widely known towards the end of the last century. The subject of this brief sketch received his early education at the Shrewsbury Grammar School whence, in 1825, he went to the University of Edinburgh, where he studied for two years. He then entered Christ's College, Cambridge University, where he took his degree in 1831. In the Autumn of the same year he volunteered as naturalist to accompany Captain Fitzroy, in the ship Beagle, on his exploring expedition round the world.

During this long voyage, lasting five years, the greater part of the South American coast, the Pacific Islands, Australia, New Zealand and the Mauritius were visited and examined and the results of his research were from time to time published in England and gave Mr. Darwin a foremost place among rising naturalists. Before the close of the voyage he was elected a Fellow of the Royal Society, in 1844. In 1839 a narrative of the voyage was published in three volumes, of which the third, containing an account of the discoveries in natural history and geology, was contributed by Mr. Darwin. From that time until 1859 he published "The Structure and Distribution of Coral Reefs" in 1842; "Geological Observations on Volcanic Islands" in 1844; "Geological Observations in South America" in 1846; "Monograph on the Family Cirripedia" in two volumes in 1851 and 1853, and soon afterwards two volumes on the fossil species of the same class, besides numerous articles contributed to periodical literature on scientific subjects.

Hitherto, though well known to a limited circle of readers, Mr. Darwin was comparatively unknown to the general public, but in 1859 his fame was extended to all lands by the violent discussions that arose on the publication of his work "Origin of Species by Natural Selection." This work has passed through many English and American editions, has been translated into a large number of foreign languages, including French, German, Dutch, Italian and Russian, and has been the subject of more reviews, pamphlets and separate books than any other work of our age. As long ago as 1873 a German catalogue of the literature of Darwinism contained 368 octavo pages of the titles of the works and the names of 312 authors, while every review, magazine, monthly, weekly and daily throughout the English-speaking world and largely elsewhere also have frequently discussed the same subject. In this work Darwin attempted to account

for the diversities of life on the globe by means of continuous development without the intervention of special creative flats at the origin of each species. The extreme conclusion from his reasoning is the relationship and community of origin of all living beings. Bitterly denounced as atheistic at the outset and ridiculed as absurd, his views have since been generally accepted, in principle if not in detail, so that the terms "evolution," "heredity," "variation," "battle of life," "survival of the fittest," have become household words. In 1862, he published "Fertilization of Orchids" and in 1868, "Variation of Animals and Plants under Domestication." In 1871 he gave to the public his treatise on "The Descent of Man and Selection in Relation to Sex." This work is complementary to that on "Origin of Species," and in it the author concludes that "man in descended from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits."

Among a large number of important separate papers by him those of most interest to agriculturists and indeed to the general public are, those "On the Formation of Mold by the Earth-worm," "On the Movements and Habits of Climbing Plants," "On the Expression of the Emotions in Men and Animals,"

no man of the present age has done more for scientific progress than Darwin. Justly therefore did all classes and denominations in his own country mourn his death, which is regretted everywhere. Justly too was a final resting place accorded to his mortal remains in that Pantheon of British nobilities, Westminster Abbey, where, in the honoring presence of some of the highest dignitaries of Church and State, of sorrowing scientists and a mourning public, beside Sir John Herschel and close to Sir Isaac Newton, was laid away the other day all that was mortal of Charles Robert Darwin.

Farm Economy.

HOW TO KEEP OUR FARMS IN GOOD HEART.

To any close observer of the way farms in the West are usually managed, the question before us assumes a magnitude of grave importance. In attempting to answer this question I will say there must be with many farmers an entirely "new departure" from their present mode of farming. For example, neighbor A, (he is the representative of a large class) wants to be a progressive farmer

whole farm to get them into decent condition to go into winter-quarters. And for fear the hay will run short, this free range is extended until after seeding the next Spring. The consequence is, the pastures, meadows and "seedings" are nearly ruined for the coming crops of grass and hay, to say nothing of the injury to the land by being tramped down through all the rains of Fall and Spring.

If we would keep our farms in good heart, we must in the "new departure," put our stock into winter-quarters early, and not allow them to leave those quarters until the ground is settled in the Spring and the grass sufficiently started to keep ahead of the stock we wish to keep through the Summer. One acre of pasture that has not felt a hoof from November to May is worth two that have been run over the year round. The same is true of meadows, and "seedings." The free range system for stock during Fall, Winter and Spring must be given up if we would keep our land in good heart and get profitable returns from our pastures and meadows.

This point gained, the next step in keeping up a farm is to seed down to clover all the land sown to small grain, which is to be plowed up the coming Fall. In the "new departure" this clover will be permitted to grow undisturbed until its growth is checked by heavy frosts; then plowed under. Remember it is raised expressly for the benefit of the land. We must feed our land if we would feed our stock.

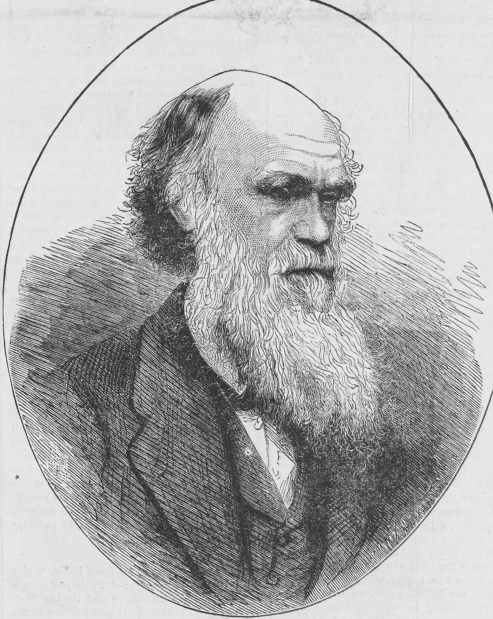
Of the necessity of using land plaster and salt I spoke in a former article. We must use manure freely in fields near the barn, and in more distant ones, once in about four years, plow under a second crop of clover. The next step in the "new departure" is to see how much stock we can keep in good condition on a given number of acres. To settle this point, there must be a careful and regular system of soiling for late Summer and Fall feeding; and of raising roots for Winter use. I am satisfied in my own mind that much of the land now devoted to pastures and meadows might be devoted to raising small grains if we were to make this change in our practice of farming. By so doing we would greatly increase the product of the barnyard and add greatly to the fertility of the soil. I think a persistent following out of the plan above outlined will keep our farms in good heart.

Waukesha Co., Wis.

TH. LOOMIS.

That Hand Sheaf Binder,

In the RURAL of May 6 is illustrated a Hand Sheaf Binder, which, while it may have some advantages over the old method of hand binding, has, in my opinion, some serious disadvantages. It is expensive. A "binder" would, of course, be required for every sheaf in the field. Supposing there were only 10,000 sheafs (and it would not take a very large field of wheat or rye for that number), there must also be 10,000 "binders." The plank and twine necessary in the construction, would cost more than "a trifle" and the time "lost" in making the "binders" would be more than the time "gained" in the binding. If the knot for the "catch" is made at the same place or thereabout, in each "binder," all sheafs must be of the same size, else it will not hold. But sheafs made by reapers are not always of the same size, owing to unevenness of grain, and even in hand making this cannot be always attained. The knot is not "adjustable." There is great liability of the sheaf's being accidentally unbound, especially if an end be left, as shown in the cut. A fork tine caught under the band near the fastening point in the sheaf, might easily lift the knot from its place and unbind the bundle. In loading or moving away the bundles the danger of loosening would be great. These are the most apparent objections to the device. W.



CHARLES ROBERT DARWIN.

RE-ENGRAVED FROM THE (LONDON) GARDENERS' CHRONICLE.—FIG. 145.

and, latest of all, "On the Action of Ammonia on Roots."

Mr. Darwin entered but little into general society and was personally known to only a very small number of the tens of thousands of his admirers and opponents. He was always of a retiring disposition and for many years his health was all the time feeble. Both by his own researches and the bent these gave to the investigations and labors of other scientists

and keep his farm in good heart; but he has only one idea and that is to accomplish this end by keeping stock and making all the manure he can. So he goes in on the stock question—blind, shall I say! He keeps about one-third more stock than he has pasture for, so that before harvest they are on "short rations" become restless and breech, breaking into and injuring the growing crops of grain, and after harvest they are given the range of the