

—the reforming Hume—the harmonious Bishop—the financial Herries—the diplomatic Adair—the poetical Strangford, also a diplomatist, with Ellis and Ponsonby, his fellow-laborers in the last named category—the gifted Lockhart—Miss Ferrier and Adam Ferguson, connected, too, with Sir Walter Scott—Lord Robertson, the convivial Judge—Lord Rutherford, his acute compeer—Miss Mitford and strong-hearted Currer Bell—Colburn, the godfather to half the novels of the last half century—Sibthorp, the eccentric—the travelled Buckingham—Park, the sculptor—Gurney, the shorthand writer—O. Smith the preternatural—the centenarian Rogers—Black, of the *Morning Chronicle*—the life preserving Captain Manby—Archdeacon Hare—and Jessie Lewars, the friend of Burns—the injured Baron de Bode—and a long file of titled names distinguished in all the pursuits of life. The war came in for the lion's share, in sweeping among those already illustrious, or had fate permitted, those who would have been so; the gentle-hearted, courteous Raglan, the mirror of modern chivalry—the intrepid Torrens—the amiable Estcourt—the untiring Markham—the brave Adams—the gallant Campbell—the honest Boxer, and the unfortunate Christie, are amongst the most prominent of the heroes whom the bullet or the Crimean fever have forcibly taken from us. Death, too, has been busy with great people in the rank of our Allies, on the field, on the wave, in the Cabinet, in the private home:—Harrispe, Bruat, Mackou, Della Marmora, who fought so well, the painter Isabey, the statesman Mole, the poet Midziewitz, the widow Lavalette, the wife of Emile de Girardin, the brother of Victor Hugo; Count Bruhl, the antagonist of Philidor, the King of Chess; Koschew Pacho, the true type of the old Osmanli; the chivalrous Duke of Genoa; and Adelaide of Sardinia, the early lost wife of our noble Piedmontese Ally.—*Bentley's Miscellany for January.*

THE ORIGIN OF WHEAT.

Wheat may be deemed the food of Western civilization, as rice is of the semi-civilized nations of the East;—no doubt the annual consumption of rice over the whole globe is much greater than that of wheat; yet considering the superiority of the peoples it nourishes, its higher nutritive properties, and its present and future commercial value, wheat stands *facile princeps* among the cereals. It can be successfully cultivated under a greater variety of soil and climate than any other grain. It flourishes under the cold of Northern Russia, under the fogs of England, and even the burning heat of the tropics. It is an article of regular exportation from Archangel, and African travellers inform us that it is extensively raised for the subsistence of the nobility in the kingdom of Bornou, near the Western shores of Lake Tchad, some 8 deg. to 10 deg. north of the Equator.

Of its origin, nothing is certainly known. It has been cultivated since the earliest records of authentic history: in all probability, at a far earlier period it was developed by cultivation out of some wild cereal grass. Recent investigations and experiments show almost conclusively that it may be thus originated anywhere. The experiments in question were made upon the *Ægilops ovata*, a grass which grows wild in Sicily; a brief account of them we extract from Chambers' Journal. This grass produces a small seed, and when ripe it is frequently gathered in bundles by the peasantry, and the heads scorched in flame, which consumes the husk and beard, and leaves the seeds slightly roasted. In this state, they

are eaten, with relish, by those who can get nothing better. There are three or four species of it growing all around the Mediterranean. In the year 1838, M. Fabre, an enlightened agriculturist of Agde, in the south of France, considering these grasses to belong to the cereal, began a series of careful experiments on the *Ægilops ovata*, with a view to ascertain what effect would be produced upon it by cultivation. A plot of ground, sheltered by high walls, and sufficiently distant from fields of other gramine, was prepared, and in this he sowed a few seeds, in 1838. The plants grew from twenty to twenty-four inches high, and ripened by the middle of July, in the following year; and though with but few fertile spikelets, the yield was in proportion of five to one. Here was already a marked difference;—in its wild state, the *Ægilops* seldom grows higher than from six to nine inches, with curved stalks, bearing a small, flat, rudimentary ear, containing one or two grains. The stalks are extremely brittle, and when fully ripe the ears turn black, and fall off, like the leaves from a tree. In these latter respects, M. Fabre's crop of 1838 retained its original habit; for the ears were deciduous, and the stock broke off easily; but there was a marked difference in height, and in amount of produce. The seeds were again sown, and in 1840 the spikelets were more numerous; scarcely an ear without two seeds, and these more floury than before, approaching the character of wheat. In 1841 the resemblance to wheat was still more observable; the ears, which were less flat, had from two to three grains, and the beard had almost disappeared. The next year, the plants stood still, being slightly attacked by rust; the number of grains, however, was not diminished. But in 1843, the delay was made up; the stalks grew three feet high, and stronger, than in any previous season; the ears could not be easily broken off; the grains were plumper; one of the plants yielded 380 for one, and another 450 to one. In 1844, every ear was full, and the grains not so densely coated as before: in 1845, the transformation into wheat was complete; all the plants were true representatives of cultivated wheat. Since 1845, M. Fabre has sown the seed obtained with so much care, in an open field, among vineyards, and by the roadside, with a return from six to eight-fold. The stems are straight and strong, the ears are round and beardless, the grains very floury, and in no single instance has there been any return to the form of the original *Ægilops ovata*. Here, then, in seven years—if these statements are to be relied on—we have a change effected by artificial means, which may be regarded as one of the most extraordinary phenomena of cultivation. Botanists have repeatedly said that our cultivated wheat once grew wild in Sicily, Babylonia and Persia, and here we have the explanation. The brief account we have given of the history of these experiments, shows by what a gradual process a wild and comparatively useless grass was converted into our most valuable cereal. The first scientific agriculturists have come to the conclusion that the cultivated wheats are only races of the *Ægilops*—and assuming the facts in the above instance to be correctly given, it would seem that the question of the origin of wheat may now be considered settled. Its production in this manner gives us reason to suppose that it never was indigenous to any particular country—a supposition which its existence in so many different varieties, and the contradictory accounts of its origin, only serve to confirm.

We will remark, in passing, that the same supposition may reconcile the various accounts of the origin of Indian Corn, which is only a gigantic grass