

and the spikelets stand out more horizontally, than in our present forms." So again with barley, the most ancient and most extensively cultivated kind had small ears, and the grains were "smaller, shorter, and nearer to each other, than in that now grown; without the husk they were $2\frac{1}{2}$ lines long, and scarcely $1\frac{1}{2}$ broad, whilst those now grown have a length of three lines, and almost the same in breadth."⁴⁹ These small-grained varieties of wheat and barley are believed by Heer to be the parent-forms of certain existing allied varieties, which have supplanted their early progenitors.

Heer gives an interesting account of the first appearance and final disappearance of the several plants which were cultivated in greater or less abundance in Switzerland during former successive periods, and which generally differed more or less from our existing varieties. The peculiar small-eared and small-grained wheat, already alluded to, was the commonest kind during the Stone period; it lasted down to the Helvetico-Roman age, and then became extinct. A second kind was rare at first, but afterwards became more frequent. A third, the Egyptian wheat (*T. turgidum*), does not agree exactly with any existing variety, and was rare during the Stone period. A fourth kind (*T. dicoccum*) differs from all known varieties of this form. A fifth kind (*T. monococcum*) is known to have existed during the Stone period only by the presence of a single ear. A sixth kind, the common *T. spelta*, was not introduced into Switzerland until the Bronze age. Of barley, besides the short-eared and small-grained kind, two others were cultivated, one of which was very scarce, and resembled our present common *H. distichum*. During the Bronze age rye and oats were introduced; the oat-grains being somewhat smaller than those produced by our existing varieties. The poppy was largely cultivated during the Stone period, probably for its oil; but the variety which then existed is not now known. A peculiar pea with small seeds lasted from the Stone to the Bronze age, and then became extinct; whilst a peculiar bean, likewise having small seeds, came in at the Bronze period and lasted to the time of the Romans. These details sound like the descriptions

⁴⁹ Heer, as quoted by Carl Vogt, 'Lectures on Man,' Eng. transl. p. 355.