the most essential of all—the universality of the Divine love, the supreme importance of the moral and spiritual elements of religion, the supremacy of conscience, the sense of the central citadel of Christianity as being contained in the character, the history, the spirit of its Divine Founder—have beyond doubt, if not yet taken fully the place which he claimed for them, yet impressed them­selves more and more on the teaching and the preaching of every class of clergy in the church. They have lifted the teaching of those who most differed from him far above the level of a mechanical or merely ceremonial form of mediæval worship. The great cause too for which he strove so hard, that of comprehension and mutual toleration, the true “enlargement of Christ’s church,” has gained much from his efforts,—much in the present, and perhaps, in spite of some appearances to the contrary, more in the future. What­ever storms of party strife may be in store for the church, active and energetic Christians of opposite parties no longer waste their energies in mutual attacks, but have learned to work together in Christian teaching and in works of Christian beneficence. His surviving friends may rejoice to remember that no one person had, for, it may be, many generations, done so much as Stanley to draw together in friendly and social intercourse the leaders of various religious parties and of different denominations of Christians.

Those who live, and feel that they live, in an age of transition cannot venture to prophesy the precise form and colour of the religious movement which will in due time succeed that which now seems to be the most prevalent and the most outwardly active. But they may be permitted to hold that its main features were descried and anticipated, even if dwelt on with excessive emphasis, by Stanley,—to believe that the next phase of a Christian theology which shall regain a due ascendency over the thought and intelli­gence of the civilized world will be embodied in some larger realization of “the one unchangeable element in Christianity,” of the witness borne by the teaching aud life of Christ to the higher and spiritual mature and destinies of man and to the “principles of freedom, justice, toleration, beneficence, self-denial, universal sympathy, and fearless love of truth, in which all the hopes of a true and permanent development of Christian theology must take their stand.” None will have laboured more earnestly in this cause than Arthur Stanley. (g. g. b. )

STANTON, Edwin M'Masters (1833-1869), American statesman, was born in Ohio, December 19, 1814, graduated . at Kenyon College in 1833, and was admitted to the bar of his native State. Just at the end of Buchanan’s ad­ministration in 1860-61, Stanton was called upon to act as attorney-general. In 1862, after the inauguration of Lincoln, the new president, who had had great difficulties with his war office, placed Stanton at its head, where he was at home at last. His intense vigour, excellent organ­izing powers, and scrupulous honesty were the life of the Federal war department throughout the Civil War ; and it may be worth while to note that, after living through boundless opportunities of peculation, he died, like most of the public servants of the United States, a poor man. In spite of his many services to the country, it was not always easy for his associates to get on with him com­fortably ; and his quarrels with President Johnson were especially bitter in 1867-68, ending in the impeachment of Johnson by the House of Representatives. On the acquittal of the president Stanton resigned, and resumed the practice of law. President Grant, in 1869, made him a justice of the supreme court ; but his work during the

war had worn him out, and he died December 24, 1869.

STARAYA RUSSA, a district town of Russia, in the government of Novgorod, 62 miles to the south of that city, on the river Polist, by means of which and Lake Ilmen it is brought into easy steamer communication with St Petersburg. Some brine springs, of no great strength, on the eastern side of the town, were used as a source for the supply of salt as late as 1865, yielding about 50,000 cwts. annually ; at present they are used only as mineral waters, having a great resemblance to those of Kreuznach. Some thousands of visitors resort to them every summer, and owing to this circumstance Staraya Russa is better built and kept than any other town in Novgorod. The 13,100 inhabitants are supported chiefly by the summer- visitors. About 100 individuals in all employ themselves in brick-making, tanning, and sawing timber, and there

is a trade in rye, oats, and flax shipped to St Petersburg to the value of about £50,000 per annum.

The name of Staraya Russa occurs in the Russian annals as far back as 1167. It was one of the minor towns of the republic of Novgorod, and suffered continually in the wars for possession of the region between Russia, Lithuania, and Livonia. It was after­wards annexed to Moscow.

STARCH is an organized product of the vegetable kingdom, forming one of the most important and characteristic elements of plant life, and an abundantly stored reserve material for the discharge of vegetative functions. It originates within the living vegetable cell through the formative activity of chlorophyll under the influence of light, and is consequently an unfailing characteristic of all plants containing that body (compare Physiology, vol. xix. p. 54). Starch found within leaves and other green parts of plants is assimilated and trans­formed with great rapidity; accumulations of it are carried as starch-formers, and redeposited as starch in special reservoirs or portions of plants as the period of maturity approaches. In this way the body is found to gorge the stems of certain palms—the sago, Ac.—just before these plants begin to form their fruit ; it is the principal con­stituent of the underground organs of biennial and peren­nial plants, tap-roots, root-stocks, corms, bulbs, and tubers ; and it is abundantly stored in many fruits and seeds, as in the cereals and pulses, in bananas, bread-fruit, &c. It occurs in minute granules varying in diameter from 1 to 100 and even 200 micromillimetres; and the granules from different sources have each a distinct microscopic character, their forms and size being, however, affected according as they are aggregated in clusters or individually formed (see vol. ii. p. 631, figs. 3 to 6). Under the micro­scope these granules are seen to consist of a nucleus or hilum surrounded by layers arranged concentrically or ex- centrically, and the relations of hilum and layers are the most distinctive features of individual starches. Whether the hilum point bears to the granule the relation of a nucleus is a matter of dispute, the general opinion being that the grains are formed from without inwards, the centre being invariably the softest and most soluble portion, while the outer layers are most closely related to cellulose. Starch consists of a white or yellowish-white glistening powder, which on being rubbed between the fingers emits a crackling sound. It is only slightly acted on by cold water, but under the influence of heat in water it swells up, forming according to the proportions of starch and water a clouded opalescent paste. Iodine acts on it in water by producing a brilliant blue coloration, this reaction forming a very delicate and characteristic test. Diastase and dilute boiling sulphuric acid convert starch into a form soluble in hot water, whence it passes into a series of easily soluble dex- trins, and finally into the condition of the sugars, dextrose and maltose. In its chemical relations starch consists of an intimate mixture of two isomeric bodies,—granulose and starch cellulose,—or rather of a series of gradations from the one to the other, the starch cellulose being principally in the external layers, while the granulose is found in the central portions of the granules. Starch cellulose is a body intermediate between granulose and ordinary cellulose ; from the latter it is distinguished by being reducible to soluble starch by boiling in water and by digesting in caustic alkali. Together, the substances consist of a com­bination of carbon with hydrogen and oxygen, the com­monly received formula being C6Hi0O5 + 2H2O ; but Nägeli, Sachsse, and many other recent investigators show reason why the molecule should be regarded as consisting of C36H62O31 +12H2O.

As an economic product starch in its separate condition is a most important alimentary substance, the chief pure