

high, but the supply seems to be far below the requirements of the people. The United States has for many years had the largest consumption among all countries, the ratio being usually over 80 pounds per capita. Starch-sugar has been manufactured in large amount as a substitute for sucrose, but has not been entirely satisfactory for some of the important table uses. The U. S. Department of Agriculture has been for some time investigating proposed substitute sugars and has found the promising one to be maltose, that is, the sugar of malt. Malt is sprouted grain, in which the starch has been more or less converted into a sugar having the same chemical composition as cane sugar, but not identical with it. It has long been known but only recently has it been considered for specific manufacture on the large scale. Two factors have contributed to this result. The establishment of national prohibition will allow a considerable volume of grain that would otherwise be fermented to be utilized, and the plants necessary for the manufacture of the sugar will be already in part at hand in the breweries that will be no longer used for making malt liquors. All the important cereals can be used in the process. The principal installation that breweries will need will be vacuum evaporating pans, which are well-known forms of apparatus. Malt syrup has much resemblance to maple syrup, its use on the table may not be as convenient as common sugar, but it is an excellent substitute, as it has the same caloric value. For cooking and baking purposes, and for some forms of candy, it is in some respects superior to the common form. It is now being used largely in baking and soft-drink plants. It is now quoted in recent papers about 9 cents per pound in large lots. As yet, owing to the absence of any appreciable demand from housewives, grocers are not carrying the article, but it is likely that as its merits become widely known it will be as familiar as corn syrup.

Although the present propaganda is principally due to the cane sugar shortage, yet the new sugar is likely to find wide use in many ways, even in the household, as it is an excellent, wholesome syrup of delicious flavor.

H. L.

Académie Royale de Belgique. (*Bulletin de la Classe des Sciences*, 1919, No. 1.)—This, the first number published after the retreat of the Huns from Belgium, fairly throbs with historic interest. At the meeting of January 4, 1919, in Brussels, the Director for 1914, M. P. Pelseeneer, said in his address: "Since the last time we were assembled events of unparalleled gravity have come to pass. In contempt of treaties a nation claiming to be civilized attacked without motive a little people, both peaceful and inoffensive, of whose neutrality it was a guarantor. Entire regions have been sacked, civil populations have been massacred, cities have been destroyed or set on fire with their treasures of art or ancient libraries,

thousands of families are in mourning." He pays tribute later to "our powerful Allies who fought at our side for the same ideal."

In the correspondence is a communication from the University of Ghent to foreign universities directing their attention to the work of destruction carried on in that city by the agents of Prussian militarism aided by official representatives of learned Germany.

A "Brief Report on the Condition of the Palace of the Academies after the Departure of the Germans" throws vivid light on the Kultur of the invaders. A caretaker entered this building in Brussels a few days after the Armistice and was met by an overpoweringly vile smell. Two decomposing human bodies were found in the basement. The secretary describes his first visit to the former seat of the Academy of Sciences on November 18, 1918. "With some of my employes I made a rapid visit with nose and mouth covered by protecting material. A dreadful stench reigned everywhere. Neither pen nor pencil can give an idea of the abominable scene our rooms presented. From the very door of the vestibule of the left wing we had to hunt for places to put our feet in order to avoid stepping in excrement. Everywhere was the same filth, the same disorder, the same destruction—broken panes in the windows, the bronze and copper parts of doors carried off. The libraries were topsy-turvy; there were many gaps on the shelves."

An official pig-pen was found in the garden. It is not known what kind of shame hindered the Germans from lodging its inmates in the interior of the Palace, an act which would hardly have changed the appearance of the latter. The products, however, of the piggery were found as hams and pieces of bacon in the chamber of the Royal Historical Commission, which was transformed into a butcher shop.

A series of a dozen reproductions of photographs displays in lasting form to the scientists of the present and of the future the condition of the various rooms of the Palace. The "Salle américaine" containing the publications of the learned societies of the United States was completely emptied. The books which were dumped in the attic are gone.

In its last pages the bulletin reverts to its pre-war scientific aspect where is found a discussion of certain algebraic curves by M. M. Stuyvaert.

G. F. S.

