

about 250 of their miners. We presume there will be no question of the validity of such a contract. While it may be contrary to the policy of the miners' union, it certainly is not contrary to public policy, however much its wisdom may be questioned. It is a contract with consideration—regularity of employment on one side, and an agreement not to strike on the other side. While, therefore the contract is a legal one, being for considerations and not contrary to public policy or in contravention of law, it is exceedingly doubtful if its provisions can be enforced. Certainly the court cannot compel a specific performance of the contract—that is, cannot force the men to continue to work after they have struck—and it therefore becomes valueless so far as its intent to secure an uninterrupted supply of labor is concerned. The only remedy in the case of the violation of such a contract is a suit for damages, unless by its terms a certain proportion of the wages earned is retained as a guarantee for its faithful performance. But such suits are very unsatisfactory. Their expense is always more than is or can be recovered, so that as a rule suits have rarely been entered. On the whole, the experience of those who have been parties to such agreements is that they are of little value.

The argument is advanced by unions against these contracts that they infringe the liberty of the individual. While there is a suspicion of truth in the claim, it can be asserted that such a contract freely entered into by a laboring man is not as great an interference with the freedom of the individual as are in many cases his obligations to a trade union. The only difference is that in the one case the agreement that restricts freedom, if there be any restriction, is between an employer and employee, and in the other case it is between two or more employees. It is generally conceded by those who have examined into these questions that the tyranny exercised by a trade union over its members in many cases has no parallel, and is far more absolute and restraining than that attempted in the present day by employers over employees. —*Iron Age.*

### Sugar.

Our scientific knowledge in regard to sugar extends only to the fact that certain molecules of matter grouped in certain forms have the power of producing upon the moist surface of the mouth and tongue the agreeable sensation called sweet. Analysis shows the structure of sweet bodies but nothing more. So far as science is capable of explaining things, it often fails at the most interesting stage of inquiry, and this is the case with sweets. It fails to show why a lump of sugar is sweet and a drop of vinegar or acetic acid is sour. The point where light ceases to fall on the pathway of the investigator is that where curiosity and interest most intensely centre. Why bodies are sweet, sour or bitter can never be known. The mystery belongs to that department of the organic world not open to human research.

Of late years we have fallen into the habit of classing all sweets, with the exception of honey, perhaps, under the common name of sugar, as cane sugar or grape sugar and so on,

but really there is but one substance properly entitled to the name, and that is cane sugar, or sugar of a similar character produced from other substances, as beets, sugar maple and so on. All the other sweets, scientifically classed to themselves as glucose, are simply sweet gums, not sugars.

The true sugar is presented to us in the form of aggregated, well defined crystals, permanent under all atmospheric changes and elegant in lustre and freedom from color when well refined. It is not only the sweetest of all sweets, but one of the indispensable gifts of a wise intelligence to man. It is called cane sugar because it is produced spontaneously and abundantly in the cane grown in tropical climates. While it is impossible in the present state of our knowledge to make cane sugar artificially, it is quite easy to make the sweet substance known as grape sugar or glucose, and to make it in immense quantities at very small cost, which fact of itself is enough to condemn it as a sweet to take to take the place of real sugar. With the exception of air and water, perhaps, nature puts none of our absolute needs to us so easily as she puts glucose. The fact is, glucose is neither an essential nor a makeshift. We must have sugar to meet the requirements of the animal organization, and we can no more get it out of glucose than we can out of pipe clay. We may gratify the palate with glucose, but we cannot supply the natural demand. Were it possible to feed us on glucose alone, we should still find ourselves dying for the want of sugar—the glucose could not supply the demand. —*Boston Journal of Chemistry.*

### Interstate Commerce.

A late decision of the United States Supreme Court has an important bearing upon the interstate rights of commerce. An agent for a liquor house in Chicago was proceeded against before a Michigan court because he had been pushing the business of his house in Michigan without paying the tax of \$300 imposed by the act of 1875. This tax is laid upon all persons who shall sell, solicit or take orders for the sale of spirituous or intoxicating liquors to citizens or residents of Michigan, to be shipped to the State or furnished at wholesale by non-resident parties, as the law reads. The offending drummer, being arraigned before a local court, was fined. Appealing to the Circuit Court, his penalty was confirmed by a jury, and, taking the case up to the Supreme Court of Michigan, the findings of the lower courts were all sustained. The decisions rendered by the upper courts in Michigan were uniformly adverse to the defendant, and the justices were unanimous. The United States Supreme Court, however, reverses the State decisions and finds for the defendant, on the theory that the Michigan law is opposed to the Federal Constitution, which reserve wholly to Congress the power to regulate commerce between the States; that it was also unconstitutional because it operates in effect to impose duties upon imports, and because it interferes with the privileges of the citizens of other States secured under the clause of the Constitution which guarantees the citizens of each State all the privileges and immu-

nities of citizens of other States. This decision has an indirect bearing upon the rights of travelling salesmen, though arising under a discriminating law to discourage the whisky traffic. All the points made by the Supreme Court against the law in Michigan would apply with equal force to the sale of any other class of merchandise by any other means. —*Chicago Journal of Commerce.*

### The Food Value of Oatmeal.

When we examine the change that has taken place in flour when converted into bread, we see that it has gained a considerable amount of water, a non-nutritive, and at the same time has lost much of nutritive elements—albuminates, fats, carbon-hydrates and salts, a loss which has taken place while fermenting as dough, and while in the oven during the process of baking. The average loss may be stated as sixteen and one-half pounds to the barrel, or a loss of one-twelfth of each barrel, or one barrel out of every twelve, so that while flour in the beginning compared somewhat favorably with oatmeal in value, yet when made fit for eating a startling loss occurs, a loss that oatmeal is not subject to, for, by the usual method of converting oatmeal into palatable food, that is by boiling it in water, there are no changes in its elements and they exist as complete in the cooked food as they did in the natural grain. It will also be observed that there is a large percentage of "salts" in the oatmeal, much greater than in the bread or than in any other article on the table. The presence of these is necessary for the building up all that belongs to the bony structure of the body, and their absence or deficiency is the usual cause of imperfect development of bony tissue. —*American Grocer.*

### General Notes.

THE proprietor of the *Paris Petit Journal* was once a workman at three shillings a day, and now averages £100,000 a year. A daily circulation of 800,000 is claimed for the paper.

PATENT medicine stamps in England are hereafter to bear the words: "This stamp implies no Government guarantee," so as to do away as far as possible with the notion held by ignorant people that the stamp warrants the efficiency or excellence of the contents of the bottle or package.

THE manager of the American Fish Bureau at Gloucester, Mass., writes that this year's mackerel catch of the American fleet will be at least 100,000 barrels short of that of 1884, and perhaps as much as 125,000 to 150,000 barrels short. Importations of mackerel, owing to the small size and poor quality, will also prove to have fallen off some 30,000 barrels.

A SAFE that is pronounced a marvel of mechanism has just been finished for the National Bank of Scotland by a London (Eng.) firm. This immense money box, which is wholly hard steel and weighs close upon 100 tons, consumed seven months' in building, and has less than forty-eight locks. Each door weighs a ton, and the bolts thereon two hundred pounds apiece.