nation was proved to be, with the exception of slight extraneous matter, almost perfectly pure glucose. The presence of glucose in honey is well known;

The presence of glucose in honey is well known; but a crystallization or separation such as here described appears unknown, in this district at least, and possibly in others as well. Therefore it is that I deem this of sufficient moment to lay before your readers. A few other facts are pertinent. The bees in whose hive the glucose was found have never been artificially fed, nor has any special attention been paid to promote an increase in the yield of honey. Nevertheless, the yield from the hive containing the powder has exceeded, by almost three times, that of any previous year. A sample of the honey will be furnished me, when I propose determining the relative quantity of glucose contained in it, thinking that by that means some light may be thrown on this apparently unique occurrence. SIMON FLEXNER.

Louisville, June 18.

[All honey contains glucose and cellulose in about equal proportions. It is not uncommon for honey to granulate or crystallize in the comb. This crystallization often occurs when the cells are but partly full of honey, so that the granulated sugar only occupies a part of the cell. If such combs are placed in a hive, the bees will add honey, and produce the phenomenon noticed, and described above. There is nothing remarkable or very exceptional in this occurrence, though it occurs so rarely that it is not strange that most apiarists have failed to observe it. — ED.]

North-eastern and north-western Indian implements.

In reply to a note contained in *Science*, iii. 701, I beg leave to explain that Dr. Abbott misapprehends the object of the paper there discussed, my point of view therein having been that of an observer simply, not that of a critic. The particular puk-gah-mah-gun in question received description and illustration in virtue of the definite facts, that it represents the stone age of the north-west, that it is a well finished and mounted typical weapon, that it is of known tribal origin and of ascertained uses, and that, finally, it has an interesting and assured history. If my brief notice of this weapon ignored the diversity of figure found among objects of the war-club pattern, it was partly because I had undertaken to present my notes in a condensed form, and partly, also, because I believed such modification of common type generally understood by those who would be likely to honor me with a reading. I venture in this place to append one or two statements which may, perhaps, have the effect to place matters in a clear light.

The Ojibwas of Red Lake originally descended thither from Rainy Lake, their primary point of departure having been the 'Great Ojibwa,' or Lake Superior, where their tribe claims to have been cen-The Red-Lakers agree that they tralized for ages. effected settlement here about a century ago, after a desperate struggle of long duration with the Sioux, who then inhabited the region; and they impute their eventual success, not so much to superior prowess, as to the fact that the Ojibwas fought with weapons procured from French traders at the north, while the more isolated Sioux were restricted to war implements of their own manufacture. The Red Lake band continued in the stone age, so far as their domestic furnishings were concerned, long after they had discarded their tribal weapons of stone and bone. As they are by no means addicted to nice culinary distinctions, it occurred to me, in the course of investi-

gation, that the bone-breakers, being adapted to deal an effective blow, might, at the early day preceding contact with white traders, have served their owners the double purpose of utensil and weapon; that, in short, the objects used only within historic times for breaking up the bones of game might likewise have been employed prior to such time in dealings with their foe. This conjecture determined the particular line of inquiry which I followed in questioning the natives, and which was without positive results always. The matter would be unworthy of mention here, except for the purpose of correcting a misconstruction. FRANC E. BABBITT.

What's in a name?

It is a pleasant diversion to note the correspondences between people's names and occupations. Here, for instance, are the Meisels, German lithographers; and meissel is the German word for chisel, a cutting instrument. Wagner, the inventor of the palace-car, learned the wagon-maker's trade, and subsequently built his railroad-wagon; while his rival, George Pullman, justifies his name by pulling his fellow-men about the world in very sumptuous railroad-coaches.

Turning to the New-York directory, you see, that, out of the 204 Wagners there set down, 10 are in some way concerned with the making or sale of wagons. Out of 132 Carpenters, 17 are either carpenters or builders, or dealers in wagon-materials. Of 1,174 Schmids, Smidts, Schmiedes, Schmidts, Schmitts, and Smiths in New York, 202 are men who use edged tools for the cutting of wood or iron, including blacksmiths, goldsmiths, cabinet-makers, carpenters, etc.: a large number, not included in the 202, are shoemakers and tailors; but these can hardly be called smiths or artificers.

In the Boston directory, out of 336 Clarks (only a small fraction of the whole), 63 are either store-clerks or religious clerics, or engaged in pen-work of some There are 420 Schneiders (or cutters) in New kind. York, and 29 of them are tailors; but of the 91 Sneiders, Sniders, and Snyders, there is not one tailor, and only two cutters of any sort; namely, a cap-maker and a dressmaker. It would seem that the Sniders, in mixing English blood with their own, and trying from the instincts of the original trade that gave their German ancestors their name. It certainly seems that it is safe, looking at the data given, to assume that the hereditary tendencies denoted by the name are in many cases marvellously persistent. I have no doubt, that, notwithstanding the continual mingling of new blood (by marriage) with that of each class of tradesmen, we should yet find, if we could know the bent of mind of all members of the class, that the ancestral preferences and aptitudes exist in some degree in each and all. It is to be remembered, that, in the case of such names as Carpenter and Schneider, there would be a more or less strong disinclination for the owners to engage respectively in carpentry and tailoring, owing to the dislike of having to endure the lifelong punning on their names.

All that can be shown is, that, in the case of a certain number (say, one-sixth) of the members of a family or clan, the ancestral occupation reveals its pristine attraction. But the exceptions are notable. Thackeray's ancestors, according to Bardsley, were thatchers (thack, thatch, hence the thacker, and the last modified into the thackery, the thackeray, i.e., the thatcher). Shakeshaft, Shakspeare, Breakspear, from their prowess in battle; Spencer, he who has charge of the spence, or buttery; Whittier, from