

process of digestion was less thick and less stringy ; while that of the fifth hour was turbid, thin, and little or not at all stringy.

Of the hundred and forty-two specimens examined, one hundred and seven showed a yellow or green color, more or less intense, and which indicated the presence of bile. It is worthy of note, that, despite the almost constant presence of bile in the stomach, the digestion was not perceptibly disturbed, and analyses of the contents of the stomach during different hours of digestion clearly proved that the activity of the fluids was not impaired by its presence. It was also observed that the entrance of bile into the stomach partook of a sort of periodicity, a less quantity being found during the first two hours of digestion than at the time either before or after, and that the quantity was still less during active digestion, when fluids, especially beer, were taken in.

The hydrochloric acid of the juices during digestion was found, in a mean of eighty-seven examinations, to be from 1.8 to 1.9 per cent in weight of the entire quantity, — a somewhat higher percentage than that given by Richet. The acidity gradually increased during the first hours of digestion, reaching its maximum at the third hour, from which time it gradually decreased. A few times the juices were found neutral, and the highest acidity attained was 4.2 per cent.

Since Dr. Koch has shown that an acidity equivalent to two per cent of the gastric juices suffices to destroy the cholera microbe, it has been recommended that table-salt should be employed during cholera epidemics to increase the quantity of acid in the gastric juice, and thus prevent the entrance of these germs into the alimentary canal ; but from a series of experiments it was ascertained that the direct reverse was the result, and that the larger the quantity of salt introduced, the more considerable and permanent was the decrease of the acidity, so much so that at times the juices were rendered entirely neutral. Contrary to the opinions which have been expressed by physiologists, that salt increased the activity of the secretion of pepsin, experiments seemed to prove that it hindered such secretion, and when large quantities were taken, either into the stomach or by injection, the stomach digestion was most impaired. Mr. Herzen, however, would by no means deny the probability that salt injected directly into the blood increases the secretion of pepsin. On the other hand, it was established that the introduction, either by the stomach or the rectum, of some good peptogenic substance, such as broths or dextrine, uniformly hastened digestion in the stomach, and that this resulted independently of

the increase of acidity, and despite the frequent presence in the stomach of the contents of the duodenum. In other words, the digestion may be hastened, and a richer secretion of pepsin brought about, by their use ; while others, such as tea, wines, and grape-sugar, produce no effect whatever. Of the practical results of such observations, corroborating and adding to, as they do, conclusions previously and in other ways arrived at, there can be no doubt. Those who would aid an impaired digestion may seek in certain foods, such as broths, stale bread, milk or coffee, taken a while before regular meals, efficient helps ; while alcoholic drinks, and especially the sour wines, sugars, and others, may be not only of no use, but even actually prejudicial. To the child and the invalid the results are no less useful.

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#### BLINDNESS IN RUSSIA.

AT the first congress of Russian doctors, which was held in January last, many important papers were read, followed by discussions of considerable interest, some of the most eminent members of the profession from the different provinces and universities of the empire taking part in them. A very striking contribution to the study of social and sanitary questions, says the *Lancet*, was afforded by a paper by Dr. A. T. Skrebitski, on the 'Distribution and statistics of blindness in Russia.' The data employed were chiefly those collected by the military authorities who have to examine young men as they become liable to service in the army. Taking the total for the five years 1879 to 1883, the number examined was 1,388,761, of whom 13,686, or almost one per cent, were blind in one or both eyes. In certain districts the proportion was much higher than the average ; and some of the largest, or rather most populous, provinces seem to have presented the greater proportion of the blind : thus in that of Kieff, which sent up almost the largest number of recruits, — namely, 43,118, — no less than 660, or 1 in every 65, were found to be blind in one or both eyes. The smallest proportion of blind was found in Archangel, where it was 1 in 390 ; but even this is far above the proportion in other European countries.

To make the comparison with the statistics of other countries, it is necessary to subtract the number of those blind in one eye, which in Russia is found to be only a fifth of the total blind : thus, we may consider that four-fifths of the 13,686 recruits returned as blind were blind in both eyes, so that the ratio of totally blind is about 1 to 125. The ratio in England and Ireland is 1 to 1,015, and that in several other European coun-

tries is still lower, being 1 to 1,406 in Saxony, and 1 to 1,429 in Denmark. Dr. Skrebitski's paper attracted a considerable amount of attention from the lay press, the *Novosti* remarking, "We have surpassed Europe not only in mental but in physical blindness." To any foreigner, however, who reads the Russian medical journals, the valuable original communications with which they literally teem would appear to indicate the reverse of 'blindness,' in the Russian scientific world at all events.

#### BANCROFT'S HISTORY OF ALASKA.

THE history of Alaska, up to the time of the American purchase, has two divisions into which it naturally falls,—the period of independent Russian traders, fighting and competing on every hand; and the period of organized monopoly, which succeeded that competitive anarchy. Explorations of a rude sort, the vices of the semi-civilized Cossacks, and the rage for wealth represented by sea-otter skins, went hand in hand. A myriad of petty traders, bold, energetic, lustful, and avaricious, after the return of Bering's expedition, swarmed upon the Aleutian Islands, trading, hunting and robbing the natives, occasionally being slaughtered in return.

Of this period, with the causes which led to it, and its consequences for Russia and for America, Mr. Bancroft gives an extremely full and almost interesting account. Parts of it are dramatic; but the annals of so many petty expeditions with the same object, and almost always substantially similar results, cannot but be rather monotonous. Though much of the material is of only approximate accuracy, and derived from scattered and unverifiable copies of old records long destroyed, Mr. Bancroft has given what would seem to be by far the best account extant, and one not likely to be improved upon.

Of the second period we have also a remarkably full and acceptable account of the formation, fortunes, and fate of the monopoly known as the Russian American company, and of Alexander Baranoff, the man of all others characteristic of the Russian occupation of Alaska, the Peter the Great of the territory. Of history in its widest sense, the grasp of underlying motives,—the reaction of European politics, the growth of the United States, and other large forces upon the springs which governed events on the north-west coast,—there is little: the volume is rather materials for history, than history. But it is for the Russian period a very full, and in the main

sufficiently accurate, chronicle of events. Of the period succeeding the purchase (a much more difficult task) less can be said in praise. A similar division of this epoch will by its future historian be found applicable. The era of violent and unrestrained competition in this case, however, lasted only two or three years; while the monopoly which succeeded, though more confined in scope than that of the Russian company, does not differ in its essential characters, and is still in operation. The chronicle of events since 1867 is full, but by no means complete. The scientific investigations, which have been a marked feature in the recent development of the territory, are very unequally treated, and many of them pass with a bare mention; others are ignored altogether; while a disproportionate space is given to the petty affairs of the trade-monopoly above referred to. There are numerous errors of detail; and the just reprobation of misgovernment and lawlessness, which the (mostly foreign) fur-traders under American sovereignty should share with the still viler authors of the early Russian trade, seems to have been reserved for the former in unreasonable proportion. This period, however, is so much nearer the historian, so many of the actors in it are still in the active pursuit of their business, and the passions and prejudices engendered by recent rivalry are still so hot, that historical impartiality is not to be expected.

Mr. Bancroft recognizes the wealth of the territory, and gives an excellent account of its hardly touched resources, other than the fur-trade. He very justly and severely criticises the inaction of congress, which has left the territory at the mercy of law-breakers for more than fifteen years, has only recently accorded a merely nominal and almost impotent form of government, and in the past has saddled upon the inhabitants, in lieu of the law they had a right to, a succession of corrupt or inefficient petty officials. The book has an excellent index, and numerous small sketch-maps in the text. The general map of the territory is bad, out of date, and in nomenclature discrepant with itself and with text, beside containing several inexcusable and wholly original blunders.

#### OCEANA.

SIR ARTHUR HELPS once said that when Lord Palmerston was forming a new ministry, not so very many years ago, he was at loss for a colonial secretary. This name and that was suggested, and thrown aside. At last the noble lord said,

*History of Alaska, 1730-1885.* By HUBERT HOWE BANCROFT. San Francisco, Bancroft, 1886. 8°.

*Oceana; or, England and her colonies.* By JAMES ANTHONY FROUDE. New York, Scribner, 1886. 8°.