The problem now is, What is the best way to civilize the Indian and make him a citizen? The friends of the Indian race are recognizing the fact that the most speedy solution of this problem is in the education of the Indian youth from different tribes in schools, where, for a number of years, they will be wholly removed from tribal influence.

The lead in this work has been taken by the Hampton Institute, Hampton, Va., and the Indian Training School, Carlisle, Pa., the latter institution having gathered together, during the past year, two hundred and ninety-five Indian boys and girls, from twenty-four different tribes, speaking as many different languages. At Hampton the number is ninety, but includes several students who are well advanced.

Mr. Teller, Secretary of the Interior, says upon this point, "I recognize the usefulness of those schools, but I insist that they are entirely inadequate, as any number of them would be, to accomplish what is desired. The Hampton and Carlisle schools no more meet the exigency than Yale and Harvard supply education to the youth of the whole United States. There are 50,000 Indian children. We must furnish means for their education. Hampton and Carlisle will do for the training of teachers; but we must get the schools, which are to educate the masses of Indian children, out nearer to the tribes."

As yet, the means for carrying on this work have been insufficient, the general appropriation of the government for Indian education for 1881 being but $85,000, although this was increased to $500,000 by private giving. This year, thanks to Senator Hoar, the government appropriation is $500,000, which will probably be doubled by those who are interested in the peace and development of our great West and the welfare of a weaker race.

The third year Civils were assured that the questions at the examination in Hydraulics would be made very plain. Would that there was the same certainty with regard to the answers!

The Exhaust Injector.

Since the invention of the injector by the late Henri Giffard in 1858, many experiments have been made to improve its construction and economical working. The injector has justly been called a theoretically perfect feed apparatus, because all the heat not converted into work is returned to the boiler with the feed-water. If, however, the injector can be made to utilize the heat thrown away by the steam-engine, catch it as it is about to escape, and return it again to the boiler, its work as a feed-pump is not only performed gratis, but is accompanied by an absolute gain in heat energy. This is now practically accomplished by the exhaust steam injector, a European invention which is being introduced into this country by W. Heuermann, 40 John Street, New York. Its construction involves no new principle, and differs from that of other injectors chiefly in matters of proportion. Forcing water into a steam-boiler by means of exhaust steam, without increasing the back pressure on the engine, seems a paradox; but in some trials made at the works of William Sellers & Co., Philadelphia, this was done; and the curious fact was noticed, that the injector acted as a jet condenser, and actually reduced the pressure in the exhaust pipe, producing a vacuum of from one half an inch to four inches, which, of course, increased the efficiency of the engine. On account of this action of the injector, it will be found especially useful where exhaust pipes are not large enough to convey away the exhaust steam, a fault of frequent occurrence. It used to be supposed that the pulsations of the exhaust from a steam-engine would break the stream of the injector and render such use of it impracticable; but though these pulsations appeared upon the gauge attached to the injector, they did not seem to affect its practical working. In the trials alluded to, the injector forced water against a pressure of about 70 lbs., heating it at the same time to 170°. When the boiler pressure reached 88 lbs., the stream broke, but started again automatically when the pressure was reduced. These injectors will not