

of work done. From this brief and imperfect summary it will be seen that the work of the Forest Department demands legal ability, geometric skill, botanical knowledge, administrative talent, engineering faculty, scientific experience, police ability, and economic science, besides all the qualities required for success in the financial, educational, commercial, organizing, and record work.

In spite of its limitations and its difficulties, the aggregate work of the Forest Department of India has produced a result which has been rightly described by Sir Richard Temple as one of the greatest achievements of the Victorian era; and it has been a work, too, which, as another authority, Sir George Birdwood, has shown, was begun only in the nick of time. "A few more years' delay," he says, "would have resulted in the total loss of half the forests of India," of which now the "reserved" portions alone, where the state declares and maintains its right to the entire produce, cover more than seventy thousand square miles, a total to which large additions have yet to be made in Madras and Burma. These reserves, moreover, increase annually in value. Land which was once denuded of trees by the unrestricted grazing of cattle, especially of goats, which browse by choice

upon the topmost-growing shoots of young saplings, is covered once more with forests which annually yield a richer output of timber and fuel. Valuable trees have replaced more worthless kinds. Carefully guarded, the rubber-tree grows more numerous and more productive; and in a country like India, where the mortality from fever largely exceeds that from all other causes combined, the cheap supply of quinine, dispensed in *picce* packets throughout the villages by government agency, would alone more than repay the labors of the Forest Department. Yet its most striking and important achievement has been the acclimatization of valuable foreign trees. Already many Indian landscapes have been completely altered by the Casuarina and Eucalyptus (beefwood and blue-gum) of Australia, while the introduction of the apple and chestnut in the Himalayas has brought new and important food-supplies within reach of the people. The Buddhists, the Arabs, and the Portuguese each added somewhat to the flora of India, partly from religious motives, and partly for luxury. To the British has been reserved the honor of surpassing their combined efforts by the exercise of a statesmanlike philanthropy which preserves and enriches the vegetable wealth of the land for the good of its population.

THE AUSTRIAN EDISON KEEPING SCHOOL AGAIN.

BY MARK TWAIN.

BY a paragraph in the "Freie Presse" it appears that Jan Szczepanik, the youthful inventor of the "telelectroscope" [for seeing at great distances] and some other scientific marvels, has been having an odd adventure, by help of the state.

Vienna is hospitably ready to smile whenever there is an opportunity, and this seems to be a fair one. Three or four years ago, when Szczepanik was nineteen or twenty years old, he was a schoolmaster in a Moravian village, on a salary of—I forget the amount, but no matter; there was not enough of it to remember. His head was full of inventions, and in his odd hours he began to plan them out. He soon perfected an ingenious invention for applying photography to pattern-designing as used in the textile industries, whereby he proposed to reduce the customary outlay of time, labor, and money

expended on that department of loom-work to next to nothing. He wanted to carry his project to Vienna and market it, and as he could not get leave of absence, he made his trip without leave. This lost him his place, but did not gain him his market. When his money ran out he went back home, and was presently reinstated. By and by he deserted once more, and went to Vienna, and this time he made some friends who assisted him, and his invention was sold to England and Germany for a great sum. During the past three years he has been experimenting and investigating in velvety comfort. His most picturesque achievement is his telelectroscope, a device which a number of able men—including Mr. Edison, I think—had already tried their hands at, with prospects of eventual success. A Frenchman came near to solving the difficult and intricate problem

fifteen years ago, but an essential detail was lacking which he could not master, and he suffered defeat. Szczepanik's experiments with his pattern-designing project revealed to him the secret of the lacking detail. He perfected his invention, and a French syndicate has bought it, and will save it for exhibition and fortune-making at the Paris world's fair, when the fair opens by and by.

As a schoolmaster Szczepanik was exempt from military duty. When he ceased from teaching, being an educated man he could have had himself enrolled as a one-year's volunteer; but he forgot to do it, and this exposed him to the privilege, and also the necessity, of serving *three* years in the army. In the course of duty, the other day, an official discovered the inventor's indebtedness to the state, and took the proper measures to collect. At first there seemed to be no way for the inventor (and the state) out of the difficulty. The authorities were loath to take the young man out of his great laboratory, where he was helping to shove the whole human race along on its road to new prosperities and scientific conquests, and suspend operations in his mental Klondike three years, while he punched the empty air with a bayonet in a time of peace; but there was the law, and how was it to be helped? It was a difficult puzzle, but the authorities labored at it until they found a forgotten law somewhere which furnished a loophole—a large one, and a long one, too, as it looks to me. By this piece of good luck Szczepanik is saved from soldiering, but he becomes a schoolmaster again; and it is a sufficiently picturesque billet, when you examine it. He must go back to his village every two months, and teach his school half a day—from early in the morning until noon; and, to the best of my understanding of the published terms, he must keep this up the rest of his life! I hope so, just for the romantic poeticalness of it. He is twenty-four, strongly and compactly built, and comes of an ancestry accustomed to waiting to see its great-grandchildren married. It is almost certain that he will live to be ninety. I hope so. This promises him sixty-six years of useful school service. Dissected, it gives him a chance to teach school 396 half-days, make 396 railway trips going, and 396 back, pay bed and board 396 times in the village, and lose possibly 1200 days from his laboratory work—that is to say, three years and three months or so. And he already owes three years to this same account. This has been overlooked; I shall

call the attention of the authorities to it. It may be possible for him to get a compromise on this compromise by doing his three years in the army, and saving one; but I think it can't happen. This government "holds the age" on him; it has what is technically called a "good thing" in financial circles, and knows a good thing when it sees it. I know the inventor very well, and he has my sympathy. This is friendship. But I am throwing my influence with the government. This is politics.

Szczepanik left for his village in Moravia day before yesterday to "do time" for the first time under his sentence. Early yesterday morning he started for the school in a fine carriage which was stocked with fruits, cakes, toys, and all sorts of knickknacks, rarities, and surprises for the children, and was met on the road by the school and a body of schoolmasters from the neighboring districts, marching in column, with the village authorities at the head, and was received with the enthusiastic welcome proper to the man who had made their village's name celebrated, and conducted in state to the humble doors which had been shut against him as a deserter three years before. It is out of materials like these that romances are woven; and when the romancer has done his best, he has not improved upon the unpainted facts. Szczepanik put the sapless school-books aside, and led the children a holiday dance through the enchanted lands of science and invention, explaining to them some of the curious things which he had contrived, and the laws which governed their construction and performance, and illustrating these matters with pictures and models and other helps to a clear understanding of their fascinating mysteries. After this there was play and a distribution of the fruits and toys and things; and after this, again, some more science, including the story of the invention of the telephone, and an explanation of its character and laws, for the convict had brought a telephone along. The children saw that wonder for the first time, and they also personally tested its powers and verified them.

Then school "let out"; the teacher got his certificate, all signed, stamped, taxed, and so on, said good-by, and drove off in his carriage under a storm of "*Do widzenia!*" ("au revoir!") from the children, who will resume their customary sobrieties until he comes in August and uncorks his flask of scientific fire-water again.