THE DESTRUCTION OF FORESTS.

We clip from the *American*, of Nashville, the following article on the destruction of our forests and the climatic changes sure to result therefrom:—

"The rapid destruction of forests in the United States is a fruitful source of disquietude to the far seeing statesman, as well as to the man of science. That forests exert a controlling influence on climate is a fact too well known to admit of controversy, and it is quite possible that many of the countries of the old world that were once the theatres of busy life have been rendered almost uninhabitable by the destruction of the forests.

"Historians tell us that the land of Canaan, in the reign of David, supported probably a population of 5,000,000 Now we know that the extent of territory comprised in Palistine never exceeded at any one time more than 12,000 square miles, so that it must have supported a population of more than 400 to the square mile, which is twice as great as the most densely populated state in America. Nothing can give us a better idea of the original fertility of soil than the fact that this numerous population derived its support almost exclusively from agriculture. Ships were occasionally sent to Ophir and to Tyre on trading expeditions, but there was no commerce in the modern sense of the term, and no manufactures. A few plain artizans plying their vocations for a pittance a day, and a few sailers were almost the sum total abstracted from agricultural industry. The population of that country, once so great, does not exceed at this time 300,000, or not one-tenth, what it was in ancient times. Now, the severity and injustice of the government, together with the many disastrous wars through which the people have passed, doubtless has done much to reduce the population from what it was in the glorious days of the poet king to what it is to-day.

"But there is a more potent cause. The climatic changes induced by the almost total destruction of the forests have rendered all the hill country unproductive. There are no forests now in Palestine. Nothing but shrubs and fruit trees are to be seen. Even the far famed cedars of Lebanon have almost disappeared. Only a few here and there may be observed standing as monuments of their former glory The hills of Judea, that once wore a perennial verduro, are now masses of barren rock, and the brooks, famous in scripture and in song, are now nothing more than wet-weather branches. The source of all fertility has been destroyed by annihilating all the agencies for cooling and condensing the vapor which ascends from the ocean. Droughts are now the general rule, not the exception. When rains have once begun, however, they continue. The same causes which produce dry weather operate to prolong the rains when they once begin. Had the slopes and hills been kept in forests the population would never have been reduced from 5,000,000 to 300,000. Bayard Taylor, in one of his works, speaks of large regions on the Nile that once supported a dense population that are now entirely barren, and throughout the wide expanse scarcely a tree can be seen.

"The people of the United States may be repeating the history of the ancient Egyptians, and drifting on the same road to destruction. In 1880 there were 25,708 lumbering establishments in the country, employing $181,000,000 capital and 146,000 hands, distributing $31,845,000 a year in wages, using $146,000,000 worth of material, and turning out an annual product of $233,000,000. Add to this enormous amount of timber cut the millions of acres destroyed by fire, and it will give some idea of the immensity of our forests, and the rapidity with which they are disappearing. There are but few great resources of timber left while the demand for it is increasing yearly. Congress passed an act in 1817 for the preservation of live oak and cedar for naval purposes on all the public lands. The Supreme Court, in the case of United States vs. Briggs, S. Howard, construed the statute as authorizing the protection of timber on all public lands. More recently laws have been passed by many of the Western States encouraging the planting and raising of forests and the general government has offered bounties in the way of land for planting trees. The arbor days are generally observed, and millions of trees are annually set out, but all this falls short of repairing the enormous waste now going on. It is estimated that 10,000,000 acres of forest are annually destroyed, while it would be difficult to show that one-tenth of that area is yearly planted in trees. In England, where the laws of primogeniture are in force, the protection of trees on an estate is considered a filial duty. The landed estates, held for the most part by the nobility, are prized more than any other specie of property, and the destruction of forests is less necessary on account of the cheapness of coal. The Duke of Norfolk has a park that is 16 miles in circuit, and the Marquis of Bradalbane can ride a hundred miles in a straight line through his park and arable lands. Tenants often live to an old age on these estates without ever having seen a tree felled. More timber is destroyed in the United States in one year than in England in a century.

"For Tennessee some provision should be made to protect our timber, or at least some encouragement given to plant trees. Our old fields that lie grim and fallow, like samples of a ruined world, could be reclaimed by planting them in trees, and if no other good should be accomplished the landscape would be beautified, the broom grass exterminated and the gullies checked.—*Southern Lumberman.*"

ABOLISHING THE ALPHABET.

A reporter of the Pittsburg *Times* tells of an interview he had with a young man now engaged in making a living by selling liquid blue, as follows:

"By trade," he said, "I am a type setter, and I have been working about eight years on a system of shorthand type that I have about perfected. It is designed to take the place entirely of Roman letters now in use in writing and printing. By its use matters can be put in about one fourth the space it now occupies. Signs representing sounds, you understand, will take the place of letters."

"That a big scheme.,'

"Yes; but perfectly feasible—quite as feasible as the present system of letters and spelling was with its inventor. By this system every language can be written with the same signs—a universal written language. I have some 350 signs, all very simple and not one as complicated as the present lower case 'g.' As printed every type forms two signs—by being reversed—some our, and in type above pica in size they will form eight and sixteen, as they can be made octagon in shape in the body, and, according as they are set in the form, represent different sounds. I studied three different systems of shorthand in search of one that would answer my purpose, but none did so fully. Scovel's came nearer than the others, but I had to supply a great many of the signs by my own invention to hit the peculiar purpose.

"There are five sounds in the German language that differ from the English. I am familiar with German, French and Spanish and know some little of Polish, and I think the same symbols as used in the English will supply written signs for them all, though that is really unimportant, as it will not be above a century before the English will be the universal language. The Chinese is now, in point of territory covered, the most prevalent language, the Spanish next, and English third, but the progress of the last hundred years has been marked in favor of the latter."

"You have scarcely the place here to carry on scientific studies," said the *Times* man with a glance about the room.

"A little crowded" said the inventor, "but when a man has it in his head his surroundings don't much matter. I haven't the money to buy the books I would like to have, but I frequent the Y. M. C. A. library and I have friends to loan me what they have. I have received much encouragement from several gentlemen to whom I have explained my ideas, and think I can secure all the financial assistance I may need."

HOW BRUIN HUGGED A BUSY SAW.

"Talking abut funny things," said a big, bronzed bearded man in the reading room of an uptown hotel last night, "the funniest thing I ever heard of happened in my saw mill out in Michigan. We used a heavy upright saw for sawing heavy timber. One day not long ago the men had all gone to dinner, leaving the saw which ran by water power, going at full speed. While were away a big black bear came into the mill and went nosing around. The saw caught his fur and twitched him a little. Bruin didn't like this for a cent, so he turned around and fetched the saw a lick with his paw. Result a badly cut paw. A blow with the other paw followed, and it was also cut. The bear was by this time aroused to perfect fury, and rushing at the saw, caught it in his grasp and gave a tremendous hug. It was his last hug, and we lived on bear steak for a week. When we came up from dinner there was half a bear on each side of the saw, which was going ahead as nicely as though it had never seen a bear. This is a fact, so help me Bob," and the big lumberman bit off a fresh chew of tobacco.—*N. Y. Tribune.*

CANADIAN PACIFIC.

The political and commercial value of the Canadian Pacific railway, when completed, will be incalculable. Among its more preceptible political results will be the strengthening and hastening of the operations of the army and auxiliary forces in Canada, Australia, India and the eastern colonies, and of the navy on the Pacific, Australian, Indian and China stations. It will also facilitate the quelling of disturbances in the vast Dominion through which the line passes. The length of the railway is 2,870 miles. It runs through British territory, and will be in communication with the eastern provincial railway system of Canada. Ninety-five days were required to move the men from Toronto to Winnipeg, about the centre of the Dominion, in 1870, to suppress the Red River rebellion. In the spring 1886 the "Canadian Pacific Express" will run from Montreal to Vancouver or Burrard Inlet in ninety hours, and passengers and mails from England will be able to reach the Pacific by this route in thirteen or fourteen days. Troops, stores, boats and crews can also be conveyed from Halifax to that ocean in five days, without proceeding through foreign possessions. British Columbia and Vancouver Island, which have hitherto been in a very defenceless condition, will now have the advantage of speedy and material reinforcements for their protection, and in order to enable the navy to work on the Pacific station, the company contemplate a line to some port of Nova Scotia or of Cape Breton, whereby the passage between England and Vancouver will be reduced to about eleven days, except for troops and warlike stores, which will take a day more, on account of the circuitous line of the Intercolonial railway. Every facility will be granted for the carriage of troops, crews and war stores. These men will be provided with emigrant carriages, wherein comfortable seat beds will be available. The company propose to run steamers between Port Moody, the Pacific terminus of their railway, and Japan and China, and another branch between that port and New Zealand and Australia. Passengers will be able to arrive in Japan in thirty days and Hong Kong in thirty-six days. If reinforcements are urgently required by India, they will reach Calcutta or Madras more quickly from Halifax than from this country, if they could not proceed by the Suez canal. Again, as Halifax is much nearer England than New York, even if the steamers of the Canada Pacific Railway Company do not go at a greater speed than those of the Pacific Mail Steamship Company, passengers to New Zealand and Australia from United Kingdom ports will be able to reach the Antipodes, via Port Moody, sooner than by the San Francisco route. In many other respects this line will be of immeasurable advantage in war with a maritime nation, especially for the supply of provisions to the home population, and will greatly enhance the prosperity of the Dominion.—*Army and Navy Gazette.*

THE BEST FOUNDATION FOR WOOD PAVING.

Sir Robert Rawlinson, C. B., writes to a contemporary:—"Your remarks on the rough surface state of the wood pavement in Regent Street deserve special notice. I alter slightly a paragraph in your short notice of the uneven wear of the blocks into a question which I venture to answer. 'Is there no better system than this for the preservation of a firm and homogeneous bed for the wood blocks?' My reply is, 'Yes, there is.' The prime necessity for any form of road is an absolute sound foundation, fully drained. For streets the best material for the foundation will be a layer of lias-lime or Portland cement concrete, not less than 6 in. in thickness in ordinary streets, 9 in. in such as Regent Street; this concrete to be 1 to 5, and, after being laid, to have no less than one week allowed to set. Portland cement concrete should be well sprinkled over with water each day. Portland cement sets better wet than dry. Concrete blocks may even be sunk in still water with advantage to the setting property of the best cement. The surface of the concrete must have the true contour of the street, and must be absolutely true and smooth, finished with a thin coat of lime or cement mortar, 1 to 2 of clean sharp sand. On a foundation so prepared the blocks should be laid not more than ½ in. apart, to be run full of hot asphalte. Anson's patent, or bottom layer of thick felt and jointing with similar felt, makes one of the best wood pavements, adding about 2s. per square yard to the cost. An example of the wood pavement laid on a sound Portland cement concrete asphalte jointed may be seen in Parliament Street, Westminster and at Whitehall. The failures in wood pavements in London streets—and there have been and are now many such—are a result of defective foundations. These have either been to weak or improperly made hence their quick destruction. Street surfaces and substances are subjected much more to ramming than to wear by friction. All quick traffic results in the wheels, being rammers, jumping—and this in proportion to the roughness of the surface and the velocity of the waggon, omnibus, cap, or carriage. A light quick traffic punishes any road more than a slow and a heavy traffic; but a quick heavy spring van traffic punishes any road or street most. A sound foundation is the true road; the blocks of wood are surface veneering, to be renewed when fairly worn."

PERILS OF RAFTING.

A mishap, which very nearly resulted in a drowning accident, occurred to a raft of timber this morning while making the decent of the Lachine Rapids. About nine o'clock twelve large cribs of oak and pine, which comprised a raft belonging to Messrs. D. D. Calvin & Son, of Garden Island, were proceeding down the Rapids when, owing to the sudden veering of the wind, they were thrown close upon one another. Five of the cribs broke up in the Rapids and two more struck on pier No. 12 of the Victoria Bridge, loosening their fastenings.

On one of the latter cribs an Indian, whose name could not be ascertained, was thrown into the water, and for some minutes was in a perilous position. There was no pieces of timber within twenty or thirty feet of him, and the nearest pieces were drifting faster than he could swim. After buffeting the water, which was very rough, for a considerable period, he was picked up by Messrs. Joseph Vincent and James McGurk, who had put off from shore in a small sail boat, on witnessing the accident.

There were twenty three men on the cribs, and some of the escapes were marvellous. None of the men got in the water in the Rapids break up. This is the first of the season's rafting casualties, and was due largely to a sudden change of wind which verred in a few minutes from the south to a strong north easterly gale.—*Montreal Witness, June 22.*

THE Oconto company is daily piling about 350,000 feet of lumber cut at its two mills at Oconto and Nahma, Wis. This includes 60,000 feet of deal daily for the English market. The firm has sold 3,000,000 feet of deal for future delivery at Quebec.