

with the locality, the track at the point shown was previously straight and level; the sharp double curve in the foreground, and the abrupt change of grade in the middle distance, being wholly due to the sudden movement of the earth's surface. A press despatch from Charleston on Sept. 2, in relation to a railroad accident at a point near that shown in the engraving, states, that, at the moment the shock was felt, it seemed to those on the train that the earth had suddenly given way; that the train plunged with frightful velocity down a steep declivity, was then raised by a terrestrial undulation, and, having reached the top of the wave, was hurled down an embankment by a sudden swerving of the earth to the right and left.

In many places along the lines of the railroads near the centre of disturbance, the track had the appearance of having been alternately raised and depressed, like a line of frozen waves. The movement of the earth had also been from east to west, bending the tracks in reverse curves, many of the curves taking the shape of a single, others of a double letter S.

A train near Jedburg was running along at the usual speed, at the time of the earthquake, when it suddenly seemed to leave the track and go up into the air. This was the upward wave. It descended with equal suddenness, and as it came down it was flung violently over to the east, the wheels apparently being raised some distance from the rail on the west side of the track. Then there was a reflex action: the train righted, and was hurled violently to the west, finally subsiding to the track and taking a downward plunge, evidently the descending wave. It was afterwards found that the train had passed over one of these serpentine curves with undulating surface, and very probably at the instant the movement of the earth was taking place.

THE TIMBER OF THE ENGLISH COLONIES.

ON Oct. 8 a large number of colonial visitors, together with some of the leading civil engineers, builders, timber merchants, and others interested in the employment of timber, assembled by invitation at the Chelsea works of Messrs. A. Ransome & Co., London, in order to witness a series of practical experiments with different varieties of colonial timber at present commercially unknown in England.

After the experiments, which were conducted with more than forty different varieties of timber from India and the colonies, and comprised tree-felling, cross-cutting, sawing, planing, moulding, morticing, tenoning, and boring, while the manu-

facture of such things as casks, doors, pick-handles, carriage-spokes, and railway-sleepers, was carried to its completion, and the articles exhibited to the assembled guests, Mr. Allan Ransome opened the proceedings by announcing the conclusions at which the recent experiments had enabled him to arrive in respect to the qualities of the different varieties of colonial timber submitted to his notice. He said, that, among the forty different species, some stood out as pre-eminently suitable for the English market. There were iron bark and mountain ash, from New South Wales, both suitable for wheelwrights' work, and the former, owing to its peculiar hardness, for piles and railway-sleepers as well; black-wood, from Victoria, suitable for carriage-building, cabinet-work, and case-making; Karri-wood and Jarrah, from western Australia, both useful for joiners' work, sleepers, furniture, and piles, of which he could say that there was no fault to be found; black-pine, red-pine, totara, and kauri, from New Zealand, which could be employed for furniture, cabinet-work, house-building, and general purposes, kauri being especially useful; Douglas fir and the swamp ash, from Canada, both suitable for building, joiners' work, etc., the latter being particularly sound, strong, tough, and cheap; yellow-wood, stink-wood, and sneeze-wood, from the Cape of Good Hope, the two former species suitable for furniture, building, and joiners' work, and the latter, from its unusual durability, for piles, posts, telegraph-poles, etc.; Billian and Serayah, from British North Borneo, the former suitable for beams, piles, and every purpose where durability was necessary, and the latter for furniture, veneers, etc.; and, lastly, Padouk-wood, from India, which was suitable for joinery, carriage-building, and furniture, was exceedingly plentiful, and was grown near the coast. Many samples of wood sent had unfortunately been too small for experiment; but of those operated upon he could say that they had all been found suitable, so far as quality was concerned, for their various purposes.

The Hon. Malcolm Frazer (western Australia) said, that, of the Karri and Jarrah timbers, there was a considerable supply in London at the present moment. Large quantities of several hundred loads of these species might be obtained at £7 per load, or in smaller quantities at a slightly higher price. Their cost was only half that of teak.

Prof. P. L. Simmonds (New Zealand) said that New Zealand produced a vast number of ornamental woods, as well as many useful ones. In the latter line, however, the colonists of New Zealand would not be able to compete with other

colonies in the home market, partly because of the local demand for their woods, and partly because the cost of carriage would be too great.

Professor Macoum (Canada) said that the reason the English merchant knew so few of the Canadian timbers was the natural indisposition existing in both countries to take a new departure from old habits. The Douglas fir of Canada was fully equal to the white-pine now employed, and when the supplies of the latter were exhausted, the former would of necessity take its place. The Douglas fir grew in vast quantities, attained a great height, and tapered very gradually. In their black-ash, too, the Canadians possessed a species of timber which would some day be very widely employed, for it had all the qualities of the now favorite white-ash, and its supply was unlimited. The Douglas fir could be supplied in England at £5 a load, and the black-ash at the same price as elm or white-pine.

Mr. E. A. Cooper (the Cape) said that the um-zumbit of that colony was, from its remarkable hardness and durability, a very desirable wood, offering more resistance to wear and tear than *lignum vitae* itself, and being impervious to the attacks of the teredos. The Cape yellow-wood could be supplied as cheaply as any, the price being about £6 10s. a load. The stink-wood, however, which was very useful for furniture, could not find a market here, owing to the high prices it commanded in the colony; namely, 3s. to 4s. a cube.

Mr. Alfred Dent (British North Borneo) said that the Billian of that country offered great attractions to the English merchant. It grew in enormous quantities, was very easy of access, and exceedingly hard and durable. Companies were wanted to undertake the supply of the wood in large quantities, at present an impossibility. As to the cost of the wood, he remarked that one firm already was prepared to supply it alongsidship at £3 10s. per ton, a price which freightage, etc., would probably increase by about fifty per cent. But competition would, no doubt, reduce these charges considerably.

THE PEOPLE ON THE KONGO.

WALCKE, on his return from five years on the Kongo, has given some interesting details in regard to the people of its banks. Those of the lower river have been brutalized by the importation of liquor, and form a strong contrast with the people of the interior, who have so far escaped such demoralization. On the upper river the Bassunde are the first people who

dress their hair. It is noted that those tribes who neglect their hair are deficient in physical and moral qualities. With the Bassunde it takes several hours to perform the toilet. They are polygamous, the wives living in pairs in little huts grouped around the principal house, where the head of the family resides. Marriage is simply a matter of bargain and sale. The number of wives in some sort gauges the importance of the husband. They have no ceremony in connection with marriage or birth, but a funeral is the occasion of much display. It is fortunate for the traders that these people, who wear hardly any thing but a breech-clout in life, when dead consume immense quantities of cloth. A man who has not worn twenty yards of cloth in his whole life will be rolled in four hundred yards to be buried.

When a death occurs, the body is energetically washed, half the village joining in the work with loud cries and howls, and distribution of rum. The body is put in a sitting posture, and painted red. The chief depressions are then stuffed out with dead leaves, and the whole is rolled with cloth into a cylindrical bale. The process goes on sometimes for three months, as the body is not put under ground until all the dead man's estate is exhausted in the purchase of material. Meanwhile it is placed in a specially constructed hut. The bigger the bale, the greater the dead man's credit; so that, in case of a chief, the people of the village will sometimes contribute to enlarge his wrappings. Finally the bale is wrapped in a particularly fine piece reserved for the purpose, and is carried in triumph about the village, and then buried with salvos of musketry, which, if the powder holds out, are repeated nightly over the grave for some time. As usual among the negroes, the death is always ascribed to sorcery, any one suspected being obliged to undergo the ordeal of drinking a certain preparation. If within a certain time the suspect is overcome by the effects of the draught, he is put to death as a murderer. The cult of the people is pure fetishism: they have a fetich for each sort of danger to which they may be by chance exposed,—one for serpents, one for crocodiles, etc. A native, being told that he must be happy at being safe from crocodiles, replied, 'Not at all: the fetich loses its power when brought near water.' They appear to serve merely as a sort of reminder what dangers are to be avoided.

They have certain medicaments which are of real efficacy, as against fevers, but will not reveal their nature: for the rest, diseases are treated by conjuration. Circumcision and excision of the clitoris are practised, and admit the patient to the privileges of maturity, as one of the tribe. They