

property destroyed or damaged by a forest fire, which, it is claimed, originated on the defendant company's railway. At the trial in the court below the jury returned a verdict for the plaintiff, but the judge, (Townsend) ordered judgment to be entered in favor of the company, for the reason that the burning of the brushwood that occasioned the fire, was done by a contractor of the company, whom he considered liable. A similar appeal by another farmer named John McDonald, who sustained loss on the same occasion is also down for hearing in the same court.

**Phosphate Milling Co. vs Montreal Warehousing Co.**—At the Superior court, Montreal the defendants moved for leave to re-open their enquete. The court was of opinion that they had not shown proper diligence; the enquete had previously been re-opened by their request and closed. Motion dismissed.

**The Canadian Copper Co's Suits—J. B. McMullen and G. B. McMullen, vs. S. J. Ritchie.** Judgment in this celebrated case has been given in the United States Circuit Court as follows:

"In January, 1886, Samuel J. Ritchie contracted to purchase from James B. McMullen and George W. McMullen, the plaintiffs, 210 first mortgage bonds of the Central Ontario Railway Co. Ritchie was to pay them \$210,000 cash and \$40,000 in stock of the Canadian Copper Co. The delivery of the bonds and coupons and the payment of the consideration were to be simultaneous. Ritchie failed to make such payment and was sued in the Canadian Court for breach of contract. Judgment was rendered against him in February, 1888, for the sum of \$238,000. Afterwards suit was brought on the judgment in the United States court in the northern district of Ohio, in September, 1888. The result was that judgment was rendered at the November term, 1890, upon the Canadian judgment for \$265,370. The case was taken upon a writ of error to the supreme court of the United States where it is still pending. Execution was issued from this court. The failure of Ritchie to set up the defence which he now by an amended cross bill seeks to arrest is fatal to his application. He seeks to attack the judgment, but shows no reason why he did not earlier acquire the same information upon which the attack is based. Mr. Ritchie was himself president of the railroad company at the time the bonds were issued and at the time the contract of 1886 was made and has continued to be president to a very late date. The McMullens had jointly with Ritchie been the owners of the road. It was his right to have examined those bonds and coupons and it is impossible for him to escape the charge of very gross negligence in this matter." The decree goes on at length into the debts of Ritchie to Judge Burke, Senator Payne and the Cornell estate. For the amounts due Judge Burke a decree was given. "There is a controversy as to the debt claimed to be due the Cornell estate on a note for \$8,000," continues the decree. "The only controversy as to the indebtedness claimed by Senator Payne against Ritchie is as to a note for \$6,000, dated in 1887, payable in three months after date. The note was worthless at the time it was executed, as the railway company had no means of payment and there was no practical way of coercing payment. Ritchie is entitled to have this note sold or collected and the proceeds applied to the payment of Senator Payne's debt. The other debts or claims of Senator Payne are allowed. The aggregate amount of compensation claimed by Mr. Ritchie for services of one kind or another for the running of one or both companies, exceeds \$1,000,000." Judge Lurton held that when Ritchie was engaged in the matter for which he claims compensation he was officially connected with the companies and that neither company had by any resolution provided for any salary or compensation to any president or director. He says: "His services have been voluntarily rendered without expectation on his part that he would be paid for them. Lands were bought by Ritchie some times in his own name, and others in either of the copper companies. He gave his services with no expectation of compensation other than as the stocks owned by him would increase in value. He was a man of great ability, energy, and a towering ambition for great enterprises. As a promoter or boomer he seems to be unrivaled. His ambition was to make millions. He believed that these mines were of fabulous wealth. Difficulties did not seem to deter him, nor danger affright him. The company's caution in his judgment was timidity and cowardice. He appears to have been an overbearing and imperious man, and the court is not particularly impressed with the scrupulousness of his methods or reliability as to details of fact. The conservatism of Messrs. Payne, Cornell and Burke was never a barrier to his exertions or an obstacle to his plans. To those ends he devoted himself with the zeal of a crusader. He had most exaggerated ideas as to the value of these properties."

The document then devotes some space to the discussion to Mrs. Ritchie's stock, the judge holding that a decree will be drawn, directing that the collaterals held by Mr. Cornell's executors, other than those belonging to Mr. Ritchie, be first sold and then the coupons levied upon by the McMullens to pay any further sum be next sold and if any surplus remains after satisfying the Cornell debt the McMullens will be entitled to such surplus, and if there be a deficiency enough of Mr. Ritchie's securities will be sold to make good such deficiency.

Summing up, Judge Lurton said that the McMullens will deliver the bonds and coupons sold to Ritchie and for which they have obtained judgment to Clerk Belford, who is appointed special commissioner, and take his receipt. Each of the defendants will do the same. The commissioner will, after advertising, sell at public sale each lot of collaterals. The sales will in each case be for cash unless the council for all parties agree upon a different mode of sale. The sale is not to be made earlier than ninety days from date to give Ritchie an opportunity to pay off the several amounts due to complainants Burke, Payne and Cornell and all the costs of the cause.

The claims of the different parties to the suit are set off by the court as follows: H. B. Payne, \$600,000; Judge Burke, \$230,000; Cornell estate, \$200,000; McMullens, \$270,000.

### The Coolgardie Gold Fields—Rich, Perhaps, but Costly.

(From the Investors Review.)

Coolgardie! Who has not heard the name? Its praises have been sung incessantly of late, and by all the members of the band, from the Agent-General down to promoters, punters, and touts. The song has been ever the same—gold, gold, until the whole city is sick to death with the thing. It is impossible to take up a paper without one's eyes falling on further marvellous gold discoveries at Coolgardie, or at the Murchison or Yilgarn fields. Crowds are rushing here, crowds are rushing there; two or three men in as many days simply by a hand machine have obtained so many hundred ounces of gold; water has been found in plenty, and so forth. We quite expected all this, for preparations have been for some time in progress to introduce to the London market companies to work the gold fields of Western Australia, even down to the Agent-General hiring a shop window in Gracechurch street in order to display some samples of the metal. Gold has long been known to exist in Westralia,

as it is now the fashion to call the colony, and since 1885 various fields have been "proclaimed;" but former attempts to "boom" the place were not successful, mining operations being too heavily handicapped by difficulties and cost of transit and the lack of water. Since that time the Government of Western Australia has expended some money on roads and railways and in making experiments for the storage of water. It also adopted the pretty sure way of getting the country developed by selling immense tracts of land to enterprising speculators for very little money, in spite of the known or suspected riches. We have no desire to disparage gold mining in Western Australia; but the public must be told the truth. Gold is there in large quantities, at and near the surface. Whether it takes the form of proper and well defined lodes which continue to any depth, has yet to be proved; but the extraordinary richness of the finds suggests that the lodes are "pockety," and not permanent. The country is little better than an arid desert, whereas timber will be largely wanted if any real mining is to be done. Railways are being slowly constructed, but are still many miles from the seat of operations. Of water there is none, beyond the sea water, between 100 and 200 miles away, though this, of course, can be condensed at considerable trouble and expense. Even the optimistic Agent-General admits that the lack of water is a very urgent question. "There is," he says, "a skeleton in every cupboard, and with them it is the question of water." The Government have spent a fair amount in water conservation, but the average yearly rainfall does not exceed twelve inches, and is immediately sucked in by the parched soil. Artesian wells are spoken of, but good authorities think little of the idea. The drawback to the industry is therefore plain enough—the great cost of working, and unfortunately it is "writ large." It is almost a repetition of the Queensland "boom" of some seven or eight years ago, when over two dozen companies were formed with an approximate capital of about 5 millions, of which four-fifths were taken by vendors and promoters. How many of these companies are still at work? All but very few have been wound up and the money lost. So it will be with these latest creations, and the public will have to use great caution in having anything to do with such traps. If the remaining companies to be brought out—and we understand that a great number of ventures are waiting to be issued—are not started upon a more solid basis, Coolgardie will stand no chance whatever. If it had ever stood much chance it would have been developed years ago. Shareholders are face to face with their usual privileges—reconstruction and calls, or the swift death of all their hopes.

### The Status of the Nickel Industry.

(From the Engineering Magazine.)

The large increase in the production of nickel during the past few years is mainly due to the introduction of the metal into material designed for war purposes, the toughness of nickel-steel having been found of considerable value in the manufacture of objects which are to be subjected to sudden and excessive stresses. It has been found that steel alloyed with a small percentage of nickel (3 to 4 per cent.) possesses great tensile strength with a corresponding elastic limit. The percentage of nickel used in the alloy has a marked effect upon its physical characteristics, the advantage of steels containing a low percentage of nickel not being found in richer mixtures. For instance, a gun manufactured of steel carrying 27 per cent. nickel did not give satisfactory results, treatment after forging reducing its physical qualities below simple steel.

Up to the present time nickel-steel has met with an extended use only on the part of national governments, such being the inertia of custom that it has not been introduced openly into the arts and manufactures. This is partially due to expense attending its manufacture, partly to a conservative spirit which hesitates to employ a new material, engineers not caring to call for it in their specifications and manufacturers hesitating to advocate its introduction. It is very important for the nickel industry that this nickeliferous iron alloy should meet with a general introduction because in that case nickel would find a ready and ever increasing market. That such a desideratum can be reasonably looked forward to is foreshadowed in the opinion recently expressed by one of our best authorities on steel subjects who stated in a letter to the writer that the qualities of nickel-steel are simply marvellous and if properly pushed it should have a great future. On this account the future of the metal seems closely bound up with that of nickel-steel and the limited extent to which this material has already been employed has given the nickel industry a considerable stimulus, the remarkable results obtained from physical tests of this material affording much hope for its ultimate extended use. Although the results obtained in the cases of certain Harveyized plates recently submitted to the Government for testing purposes caused some doubts to be cast upon their effectiveness, still the many tests of a similar nature which preceded the ones referred to and which turned out successfully, and others which have subsequently been made, render it more than likely that in these particular cases failure cannot be charged up against the alloy. As is the case with every new industry, perfection has not been attained at once, and some failures must naturally be expected; but it has not been by any means demonstrated that the disasters which overtook the particular plates mentioned are to be ascribed to any inherent weakness in the nickel-steel itself. An accumulation of evidence obtained at Krupp's works in Germany, at the Ochata trials in Russia and at the many tests made at Indian Head and other places in this country and in France has been obtained, which goes to show conclusively that nickel-steel plates, when placed side by side with those of ordinary steel, and subjected to severe tests, are capable of withstanding greater punishment than the latter. As stated, this fact has been established upon American and foreign proving grounds again and again so as not to admit of any reasonable doubt remaining upon the subject. However our naval authorities were not satisfied with the resisting powers of nickel-steel plates but wished to carry the matter still further, and to provide for the new war vessels building a material of great surface hardness in addition to toughness so that the projectiles should be broken up on their surfaces, they still possessing the quality of not cracking. If in thus attempting to produce in ideal plate, one possessing the toughness of nickel-steel at the same time with an extremely hard outward surface, it has been found that further experience in the methods of manipulation is necessary before attaining perfection, it is hardly logical to ascribe a casual failure to any inherent weakness in the nickel-steel itself. When it is considered that the presence of 0.1 per cent. of carbon, more or less, in a plate constitutes the difference between a material which will resist cracking, or one which will fly to pieces under the impact of projectiles, the extreme caution necessary in proportioning the ingredients is apparent. Furthermore, the effects upon steel of the various processes of annealing, tempering, etc., are factors which demand serious consideration, especially in the case of heavy armor plate subjected to severe test shortly after manufacture.

Apart from the mechanical and chemical processes to which the plates are subjected, the incorporation of the nickel into the alloy during the process of manufacturing the steel may also have a considerable bearing upon the results produced. In France, which was the birth-place of nickel-steel, the method of incorporating the