The story, being written for private circulation, has all the racy freedom of the author's conversation, which, as those know who have met him, is discursive and merry enough. This trip was the realization of dreams shared by his mother and his partner and a friend when all were poor, and when the friend, being told of the first moderate success of Andrew and his partner, burst out: "Great Cæsar! boys,—if I ever get $1,500 a year income!" The book is full of contradictions: great admiration for Queen Victoria, but a contempt for monarchical institutions; passionate love for Scotland and great respect for England—but open sympathy for Ireland's rebellion; laudation of the United States and all her works and ways, banking included, at the expense of the bloated aristocracy of Britain and their down-trodden tenants; bitter hatred of war, together with eulogies of the ability of his favorite generals; exuberant fancy and a perfect mine of poetical quotation, with musical ecstacies and reflections upon libraries, alternating with shrewd business maxims and business sketches. One of these last we may give, as it illustrates the interest Mr. Carnegie can arouse in a subject with which he is familiar. At Windsor, the coaching party met Sydney G. Thomas, one of two young chemists who perfected the basic process of steel-making. Here is the story:

We were honored while here by the presence of Mr. Sidney G. Thomas and his sister, who came down from London and spent the day with us. Mr. Thomas is the young chemist, who, in conjunction with his cousin, Mr. Gilchrist, would not accept the dictum of the authorities that phosphorus, that fiend of steel manufacturers, cannot be expelled from iron ores at a high temperature. They set to work over a small toy pot, which deserves to rank with Watt's tea-kettle, to see whether the scientific world had not blundered. Let me premise that the presence of phosphorus in pig iron to the extent of more than about one-tenth of one per cent. is fatal to the production of good steel by the Bessemer or open-hearth processes. Do what you will, this troublesome substance persists in remaining with the iron. If there be phosphorus in the iron-stone you smelt, every atom of it will be found in the resulting iron; and if there be any in the limestone, or the coke or coal used, every atom of it also will find its way into the iron.

It is essential, therefore, that iron-stone should be found practically free from phosphorus; but unfortunately such ore is scarce, and, theretore, expensive. The great iron-stone deposits of England are full of the enemy; so are those of America; hence, both countries depend largely upon ores which have to be transported from Spain and other countries. One authority estimates that if all the high phosphorus ores in Britain could be made as valuable as those free from the objectionable ingredient the saving per annum would go far to pay the interest upon the national debt. Many have been the attempts to devise some tempting bait to coax this fiend to forego his strange affinity for iron and unite with some other element. But no; his satanic majesty would cling to the metal.

Messrs. Thomas and Gilchrist, in studying some highly creditable experiments made by my friend, Lothian Bell, Esq. (for he was upon the right track), discovered an oversight which seemed to qualify the results which he reached, and to render his experiments inconclusive. It was possible, they thought, that his failure might have resulted from the fiend not being *kept* out when he *was* out. So they went quietly to work with their toy pot; and, Eureka! their charm had not only exorcised the fiend, but they had discovered how to lead him away from the molten metal into the refuse and shut the door on him there. Here was a triumph, indeed! I fancy they neither ate nor slept till repeated experiments proved that the true charm had been found at last.

Mr. E. Windsor Richards, the broad manager of the largest manufactory of iron and steel in the world, was soon acquainted by them with the discovery. He tried it upon a large scale, and announced the end of the reign of King Phosphorus; but he dies hard. This was some years ago, for I read the good news a few minutes after I had landed at Naples from the East, on my way round the world in the year 1879. Many obstacles had yet to be surmounted, but now every ton of steel manufactured at Mr. Richards' great works is made from iron-stone which a few years ago was counted worthless for steel. Enough iron-stone can be had for three dollars to make a ton of pig iron suitable for steel rails. The same amount of low phosphorus stone at Pittsburgh cost last year sixteen dollars, and yet there are intelligent people who do not understand why we cannot make rails as cheap as the English.

I wonder if I could explain to the general reader how Messrs. Thomas and Gilchrist succeeded. It always seems to me like a fairy tale. I will try. In making steel, ten tons of molten pig iron is run into a big pot called a converter, and hundreds of jets of air are blown up through the mass to burn out the silica and carbon, and finally to make it steel. Now, phosphorus has a greater affinity for lime than for iron when it reaches a certain temperature, and when the air-blast brings the mass to the required heat the million particles of phosphorus, like so many tiny ants disturbed, run hither and thither, quite ready to leave the iron for the lime. These clever young men first put a lot of lime in the bottom of the pot as a bait, and into this fly the ants, perfectly delighted with their new home. The lime and slag float to the top and are drawn off; but mark you, let the temperature fall, and the new home gets too cold to suit these salamanders, although the temperature may be over 2,000 degrees, hot enough to melt a bar of steel in a moment if thrown into the pot. No; they must have 2,500 degrees in the lime or they will rush back to the metal.

But here lay a difficulty: 2,500 degrees is so very hot that no ordinary pot lining will stand it, and, of course, the iron pot itself will not last a moment. If ganister or fire brick is used it crumbles away, and besides this, the plaguey particles of phosphorus will rush into it and tear it all to pieces. The great point is to get a basic lining; that is, one free from silica. This has at last been accomplished, and now the basic process is destined to revolutionize the manufacture of steel, for out of the poorer ores, and even out of puddle cinder, steel or iron much purer than any now made for rails or bridges can be obtained, and the two young chemists, patentees of the Thomas-Gilchrist process, take their rank in the domain of metallurgy with Cort, Nelson, Bessemer and Siemens. These two young men have done more for England's greatness than all her kings and queens and aristocracy put together.

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UNITED STATES FINANCIAL CONDITIONS.

Henry Clews & Co., New York, in their special circular dated May 5, 1906, said:

A fresh wave of liquidation of almost cyclonic proportions struck Wall Street this week. Conditions were more or less unsettled by the San Francisco disaster, and the opportunity was seized to enforce some rather drastic liquidation, which fell chiefly upon a few prominent and rather too optimistic operators. This last decline in the market resulted in a drop of from 10 to 50 points in many of the active shares, inflicting severe losses in quarters which were fortunately able to stand them. In spite of this rather unusual break there are no rumors of serious trouble at this writing, and the financial atmosphere appears to have been much cleared now that the storm has spent its worst force. As has been repeatedly intimated in these advices, it was the monetary situation which furnished the instrument of power for the bears. Had it not been for the large demands of San Francisco upon an already overtaxed money market no such enforced decline would have been possible. Fortunately, we were able to secure material assistance from abroad, and thus mitigate the force of the blow. Some $30,000,000 of money has been remitted to San Francisco and over forty millions of gold has been ordered from Europe, being made immediately available through Secretary Shaw's leniency in depositing Treasury gold in return for bonds as collateral. Much of the money sent to San Francisco to strengthen local banks and prevent panic will soon return into the customary