

The Moretto is a magnificent portrait of an Italian nobleman, who sits with his head resting thoughtfully on his right hand; he is dressed in black velvet, with a tippet of light fur, the ends of which descend down the front of his dress. The figure is relieved by a brocaded curtain, of a large pattern. It is in the whole admirable, and is more of a picture than a portrait. In spirit, it is superior to a long catalogue of Titian's portraits, and almost equal to the best of them in quality. Alessandro Bonvicino, known better as Il Moretto, was a pupil of Titian, and he imitated the feeling of his master until he saw the works of Raffaello, after which he devoted himself entirely to the study of the labours of the "divine master." This picture was in the collection of Count Lechi, at Brescia; then it became the property of Mr. Henfrey, of Turin, from whose possession it passed into the National Gallery.

#### A PROCESS OF HARDENING ENGRAVED COPPER PLATES.

THE discovery, some years ago, of the process of softening steel plates, so as to render them available for engraving, was an invaluable accession of power to authors and publishers of illustrated works, which came forth in successive editions of many thousands. But it was some time before the steel surface yielded impressions at all approaching in mel- lowness, a good steel proof of the present day. In comparison with the penurious returns of the plates of the best engravers who flourished earlier in the present century, the plenteous harvest from both steel and copper in the present day is as the endless wealth of the wonderful lamp in the Eastern tale. And the result is that a great proportion of the best figure pictures of our school are engraved. These plates appear for a time in the windows of the publishers, but they soon disappear, superseded by others, which in turn yield to the succeeding stream. The softening of the steel plate was considered a power of almost unlimited resource. But there was yet a desideratum, and that was the induration of the copper plate; and to that end many experiments have been made, but every attempt has been fruitless, until, at length, a successful result has been effected in a patent just secured by M. Joubert, a French engraver, who has been for some years settled in this country. According to this process, a copper plate, after being engraved, can be prepared with a surface of hard metal, whereby it becomes qualified to yield an almost indefinite number of impressions; indeed, when we state that from one plate thus prepared ten thousand impressions have been taken without in anywise impairing the perfection of the printing surface, the fact will attest the value of the discovery. Engravings, in the first instance, are costly productions, and a print that does not at once achieve popularity, entails heavy loss; and even those which find favour with the public, after giving a few thousand impressions, require retouching; but by this process of induration all the infirmities of ordinary copper plates are obviated, repair and retouching are entirely unnecessary. Thus a copper plate, being once skillfully engraved, becomes an enduring property, giving forth an all but unlimited succession of impressions, of which a very valuable feature will be their uniform excellence. There cannot be, as in ordinary practice, the various gradations of quality—from the sharp "proof" to the fair print, and from the fair print to the faint and worn impressions, all of which degrees, although patent only to the practised eye, impart, nevertheless, a substantive value to the impression. There are, however, proprieties of quality more or less determinable by the publisher. He may determine when the proofs end and the prints begin. With publishers, the high price of engravings has hitherto been a necessity in order to secure a remunerative return for their investments; but should the invention of which we speak prove a success, and the plate, treated according to the method patented by M. Joubert, prove equal to the return of a certain number of thousands of impressions, the last equal to, or in any degree approaching, the quality of the first, then it may be hoped that Art will rival literature in its cheap and popular editions.

The hardening of the copper plate has long been in this country, as well as on the Continent, one of the philosopher's stones of the chemistry of Art, and the more earnestly has it been sought since the discovery of the method of dealing with steel, because a success in this direction must be a certain fortune to the discoverer; and if, as we hope, the surface of the plate is so effectively enduring as to throw off thousands of well-conditioned prints, this will be the fourth great Art-auxiliary which may be almost said to signalize the former half of the present century—we mean lithography, the hardening of the steel plate, photography, and, fourthly, this method of multiplying copper-plate engravings.

Through the courtesy of M. Joubert, we had an opportunity of examining certain of the plates faced with steel; as well some that have been worked, as others that were prepared for working. The substance of the discovery is the coating of the engraved copper plate by means of the electrotype process; but the most extraordinary feature of the result is the perfect equality of the deposition of the steel surface, which is so true and even that no single line of the engraving is changed; in short, a proof from the copper cannot be distinguished from a proof from the surface prepared with the electrotyped surface. On occasions, as for Art-Union prints, when a great number of impressions are required, it has been customary to electrotype the plate to the extent of eight or ten facsimiles; but sometimes an electrotype plate will fail after yielding two hundred and fifty impressions. But the plates prepared according to the patent in question will throw off many thousands of impressions without any apparent wear of the surface of the plate. And should such a number of prints be required as may wear out the surface, which results rather from wiping than its contact with the paper, then the worn coating of iron or steel (for the metal partakes more of the character of the latter than of the former) may be dissolved off from the plate, and a fresh coating of iron deposited thereon; after which the printing may be resumed as before, and by thus, from time to time, renewing the coating of iron, almost any number of impressions may be taken from the engraved plate. The following facts, which we extract from the specification, show the comparative value of the invention:—"Heretofore, in respect to plates engraved in intaglio, if of steel, they yield, on an average, about three thousand impressions without retouching; if of copper they each, yield, on an average, not more than eight hundred without retouching; whilst electro casts of copper obtained from the originals will not, on an average, each yield even two hundred impressions without retouching; in fact, such printing surfaces are so easily worn, that after the first hundred or hundred and fifty impressions there is a considerable deterioration in the quality of the work produced. Therefore, for the supply of the number of impressions often required by Art associations and others, it has been found necessary to multiply the electro casts very considerably." The specification proceeds to state the number of impressions which may be drawn from a steel-coated plate without wear. A few hours only are necessary to coat a copper plate, and since the coating, when worn, can be removed in a very short time, and renewed so quickly, the conveniences and advantages of this method of treating copper plates must supersede all ordinary resources, when large numbers of impressions are required.

The apparatus employed is that battery known as Bunsen's modification of Grove's, in consequence of its intensity. The trough is forty-five inches long, twenty-two inches wide, and thirty-two inches deep, and it is filled with water in combination with hydrochlorate of ammonia in the proportion of one thousand by weight of water to one hundred pounds of hydrochlorate of ammonia. A sheet of plate iron, nearly as long and as deep as the trough, is attached to the positive pole of the battery and immersed in the solution, and another of about half the size of the other is attached to the negative pole of the battery and immersed in the solution, and when the solution is in a state of preparation, which will require some days, the plate attached to the negative pole is removed and the engraved copper plate is attached in its place, and so immersed in the trough.

#### THE OLYMPIAN GAMES.

ALL things that happen in Greece seem to point to the anomaly of her condition and the uncertainty of her soul. Halting between two ideals, and equal to neither, she is repelled by both, and takes no practical embodiment. There is no possible compromise between the standard which she faintly sets up, and the standard to which she feebly refers. Whether to model her new institutions in the forms and spirit of her past, or to renew her past in the forms and spirit of the times to which she has drifted, she is unable to decide. From the past to the present, from the present to the past, she wanders with uncertain aims. Her memories impede her movements,—and her movements mock her memories. An ancient institution she revives in a modern form,—and a modern fact she clothes with the shapes of old. The consequence is, that all are wanting in that homogeneity without which nothing thrives. Let two examples illustrate what we mean.—Some time after their restoration to the rank of freemen, the modern Greeks, in looking up the faded characters of their great past, bethought them of the hippodrome. But, if the past furnished the idea, the present equipped it. The Athenian nobles, bent on reproducing their sires, borrowed the practice of the hippodrome from the North, rather than revived it from their own antiquity. They translated the Gothic model, in lieu of recovering the majestic image of old. Does not the strife of steeds on the plain which Hymettus overlooks, and in view of the great memories that yet haunt the Acropolis, carry the imagination irresistibly back to those games in which the princes of the world were competitors, and a nation the spectators? Beside the grand historic figure of that old classic sport, our own racings of to-day, which the Greek borrowed—notwithstanding the wide influence they have had on our national tastes, the authority of the popular sympathies, and the great resources which they have called into action,—descend into the category of the commonplace, and show like a mere affair of jockeys. The reason is, that, with that once earnest and spiritual people, their very sports and pastimes had, as it has been truly said, a purpose higher than themselves,—while those of our modern turf have a lower. Poetry, sculpture, and the sister arts, were all heralds, too, on the field of those contests, and have proclaimed their greatness to the world. The Muses of Greece went up, with the nation, to those great gatherings, and stood by the victor's chariot-wheels:—the prominent illustrative figure on the modern turf is the betting-stand, and its Muse is the blackleg standing by the "winning horse." Nevertheless, to the genius of this vulgar sport did the revived Greek hippodrome conform.—To-day, on the other hand, the spirit which should be busy with the education of the people, and the development of the natural and industrial resources of Greece, looks backward for its sanctions, and throws all these modern things into an old Greek mould. A wealthy Peloponnesian, of Jassy, has conceived the notion of reviving the Olympic games from their sleep of fifteen hundred years; and has grafted on to their athletic contests and trials of art, "an exhibition of flowers, fruits, cattle, and other articles of Greek produce or manufactures." The Queen Regent has signed a royal decree to that effect. The prizes are to be awarded by a committee appointed each Olympiad by the Government; and to consist of gold and silver medals, and wreaths of silver leaves and flowers, "worn at the buttonhole, suspended by a blue-and-white, watered, silk riband." Here, is "mixture of metaphors," with a vengeance! Here is the present jostling with the past, till both come to the ground in a somewhat ludicrous fashion. Fancy this old Greek idea—the growth of a national history, and the expression of a national mind—revived by sign-manual, and endowed by Evangelos Zappas! It shows, how little modern Greece understands of either the tradition she keeps or the mission she accepts, when she could so jumble the two together.—Revive the Olympic games!—bid the "dry bones" of history live;—turn back the stream of time!—Greece may do everything contained in the programme of Evangelos Zappas and the Queen Regent,—as she *should* do most of them,—and yet not have re-enacted the Olympian games.