

no sharp turn or sudden increase of curve at either extremity. The mouth is nearly horizontal or curving very slightly upwards at the centre. The lips in repose are firm but not compressed, and the upper one is well proportioned. The chin is rounded, neither square nor pointedly oval. The lines of the forehead are not usually conspicuous. The naso-labial lines curve outward beyond the angles of the mouth, less horizontally than with esophoria, and less vertically than with exophoria. The curved line below the lower lid is nearly in exact conformity with the curve made by the fold of the upper eye-lid when it is moderately raised.

The absence of special tensions of the facial muscles, in this well-balanced face, permits a quick and easy play of the features, and the habitual absence of any forcible regulation of the eyes or of the face is conducive to a mental equilibrium and to physical endurance.

With esophoria (see Fig. 2) the brows are compressed, often flattened. The extremities often curve suddenly downwards, the inner extremity sinking into the depression bounded by the nose and orbital border. The eyelids are, in a considerable proportion of cases, not as fully opened as in orthophoria, and much less separated than in the typical cases of exophoria. Two rather strong vertical lines making each an angle with the inner extremity of a brow extend upward nearly parallel, upon the forehead, as shown in the

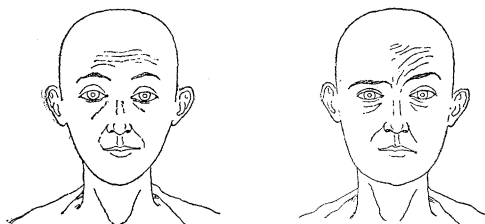


FIG. 3.

FIG. 4.

diagram. The upper lip is usually short, and the curve of the centre of the mouth upward is often pronounced. The lips are firmly compressed in repose, but in young persons with deficient physical force, the lips may be habitually open. The chin is broad and the naso-labial lines make a wider excursion outward than in orthophoria. The expression in moderate esophoria suggests firmness of character and resolute purpose.

With exophoria (see Fig. 3) the brows are usually strongly arched, often drawn upward upon the forehead, the inner extremity being often removed above and away from the nose. The lines running upward from the side of the nose, when present, are likely to diverge as they ascend. The transverse lines of the forehead are often conspicuous and are higher on the forehead than those which occur with esophoria. The upper lip is long, the centre of the mouth curves downward and the chin is pointedly oval. The facial lines are more vertical than with either of the conditions described, giving to the face the suggestion of length. The lips are not compressed and are liable to be loose and slightly open.

The expression of exophoria suggests more of idealism than of determinate purpose.

Hyperphoria is characterized by irregular features (Fig. 4). The tendency of one visual line to rise above the other demands a restraining effort in which the facial muscles often take an important part. On the side, the visual line of

which tends to rise above the other, the brow is depressed, while the brow of the side whose visual line tends downward is elevated. Thus the brow and neighboring tissues of one side aid in depressing the front of the eye, while, on the other hand, by the elevation of the opposite brow less demand is made upon the muscle which is required to rotate its eye upward.

These contrary actions demanded by the relations of the visual lines in hyperphoria affect the whole face, resulting in a want of harmony of the two sides. The angle of the mouth, on the side on which the brow is depressed, is drawn upward, while the other angle is depressed. Thus one side of the face is longer than the other. On one side, the lines of esophoria are found, and on the other, those of exophoria.

In the sketch here given no attempt has been made to describe all the various gradations between these types nor to explain the exceptions. It has been the purpose of this communication only to present the general characteristics of some of the most typical forms of expression which have their origin in the efforts to adjust the eyes.

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#### THE ARCHITECTURAL EXHIBITION IN BROOKLYN.

THERE is no question but that we stand upon the verge of a great popular revival of interest in architecture. Architectural books and magazines command wide circulations and numerous purchasers. Vast sums of money are yearly expended in building—call it architecture if you will. Exhibitions of architectural drawings have become regular features of winter life in the larger cities. On all hands greater interest is being manifested in the art than ten or twenty years ago seemed possible.

To Brooklyn belongs the credit of having supported the only popular organization for the study of architecture in the country. Professional and student bodies perform a very different function than that which naturally belongs to an institution resting upon non-professional and popular bases. The Brooklyn Institute of Arts and Sciences, especially under the direction of its present efficient head, Prof. Franklin W. Hooper, has achieved a national reputation. An organization that maintains forty-five distinct courses of public lectures, numbering on an average 400 annually, must be reckoned among the most powerful intellectual forces in the country, a power which is not limited by the fact that it confines its operations to the city of Brooklyn.

It is quite in keeping with the progressive policy of the Institute that it should provide the citizens of its native city with an exhibition of architectural drawings, which is noteworthy not only as an evidence of progress on the Institute's part, but as being the most ambitious attempt of the kind yet made in Brooklyn. First attempts are always liable to leave something to be desired, but the Brooklyn Exhibition, which has just closed, was so good on the whole that little fault may be found with it. On the contrary the gentlemen having the matter in charge are to be thoroughly congratulated on succeeding so well. Whatever faults may be found with the exhibition are faults inherent in all architectural exhibitions as a class, and are by no means limited to Brooklyn alone.

And this chief fault is the matter of the exhibition. There is no important subject on which such erroneous views prevail as on architecture. This is a fact that requires no argument. It follows as a natural consequence, therefore, that every time the architects attempt to initiate the public

into the mysteries of their art that all possible misunderstandings be avoided; certainly that they themselves make no effort to mislead those they would instruct. Yet an architectural exhibition that consists only of exteriors not only fails in giving the public a true insight into what architecture really is, but is actually, though not intentionally, a deliberate deception. Every architect knows that the designing of the facade is not the only thing he has to do in designing a building; why, then, should he not let the public know what he does and how he does it, and make his exhibitions practical schools in practical architecture, instead of simply exhibitions of facades, or pretty or ugly things — for such is the way of architecture — as the case might be.

When many older bodies fail in this respect, and keep on failing year after year, it is not to be expected that the Brooklyn Institute should make a beginning by inaugurating this much needed reform. As architectural exhibitions go the first attempt was a very good one, but it is well to keep in mind that it was not, really, an architectural exhibition, but an exhibition of facades. While this is perfectly true it contained, for its size, rather more detail drawings of a certain kind than have many more ambitious undertakings. There are several plans for the Protestant Episcopal Cathedral in New York with sections and other details, and a group of detailed drawings in the competition for the Brooklyn Savings Bank are especially attractive for the full manner in which they illustrate their subject. The greater the proportion of such drawings in our architectural exhibitions, the greater their success, and the more will the people realize the true nature and uses of architecture.

In the introduction to the catalogue the Brooklyn Institute lays down a wise programme, "occasional gatherings of the best results and suggestions." The programme is wise enough, and right enough, but unfortunately it is one of those things that can never be carried out. It depends, of course, upon the meaning attached to the word "best." If it is used in the sense of good, it is an unwise limitation, since an architectural exhibition that would consist only of the best of good buildings would be extremely limited. If it is used in the sense of the best that modern work affords it is simply repeating what would evidently follow from an exhibition arranged by architects. Unfortunately, no architectural exhibition can consist only of the best buildings; there is so much that cannot be classed as such that a too rigid scrutiny would deprive such a collection of many important examples of the newest work. Unfortunately, too, it is also true that the importance of an enterprise is no criterion for the excellence of its architecture. New York has seen many noteworthy structures erected which were disgraces both to the architects and those financially responsible for them. Even the Brooklyn exhibition contained drawings of large undertakings which all lovers of a higher architecture must regret to see carried into execution.

Some things necessarily hamper exhibition committees. The public naturally expect to see drawings of great buildings in first-class architectural exhibitions, and it is for the public the exhibitions are held and from it their support should come, if it does not. It is simply one of the architectural conditions that cannot be ignored and that will lower the standards of our architecture and our architectural exhibitions until a broader and more discriminating taste is manifested in the people generally. Then indeed will architectural exhibitions be a success and a pleasure, a source of instruction and delight, a record of past progress, and an inspiration to newer conquests.

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## CURRENT NOTES ON ANTHROPOLOGY. — V.

[Edited by D. G. Brinton, M.D., LL.D.]

**Criminal Anthropology.**

ONE of the most actively cultivated and also one of the most immediately practical branches of anthropology is that which occupies itself with criminals.

It may conveniently be presented as consisting of three departments, one of observation, the second of explanation, and the third of application. The first takes note of the anatomical and physiological peculiarities of criminals, their psychology, the diseases to which they are most liable, their nationality and ancestry, their nutrition, the environment in which they have lived, etc. The second undertakes the more difficult task of explaining these peculiarities, relying principally on the laws of heredity, atavism, congenital tendencies, early impressions and pathological sequelæ. The third, basing itself on the inferences thus drawn, aims to suggest such modifications in penal laws, and in the management of reform schools and houses of detention as will minimize the objectionable results indicated.

Anthropologists believe that this is the only method of procedure to deal intelligently with the great and growing problem of criminality. On ascertained facts of this nature, philanthropists and legislators must hereafter base their efforts, if they would attain the best results. To those who would like to pursue the subject, two works may be recommended, both published in Paris last year — Dr. X. Francotte, "*L'Anthropologie Criminelle*," and Dr. Lombroso, "*L'Anthropologie Criminelle et ses Recents Progrès*," while Dr. Thomas Wilson of the Smithsonian Institution has recently issued an excellent review and summary of the subject.

**The Origin of the Alphabet.**

We may well excuse Plato for crediting the legend that the letters of the alphabet were disclosed to man by the gods themselves. Certain it is that down till to-day we have reached no positive data as to their origin. It appears that the old notion that the Phœnicians discovered them must be abandoned. Dr. Eduard Glaser, whose long and arduous researches into the epigraphy of Southern Arabia promise to throw an unexpected light on a large tract of ancient history, expresses himself (in *Das Ausland*, December, 1891) quite positively that it is in Arabia we must search for the beginnings of this marvellous invention, and probably in Southern Arabia. There, perhaps nearly three thousand years B.C., the ancestors of the Minæans and Sabeans appear to have developed several related phonetic alphabets, from some one of which the so-called Phœnician was descended. Dr. Glaser has obtained copies of some of these as yet undeciphered inscriptions, probably more than four thousand years old.

What seems sure is, that though the early Egyptian hieroglyphic writing may have suggested the alphabet, the Egyptians themselves never developed it. What is more remarkable, and it seems to me has not received sufficient attention, is the gradual degeneration of the early Egyptian phonetic hieroglyphic system into one mainly ideographic and symbolic in the late demotic writing. The signs in the latter have often no more relation to sound than have the symbols of Chinese script. Thus, three points between two vertical lines, | . . |, means, in the demotic, "man;" but it was in no way understood to represent the sounds which were in the word, *roemt*, man, in the spoken dialect.

This degeneracy gradually arose from changes in the phonology of the tongue, while the hieroglyphic signs were