The temptations of such unbridled hypotheses are the curse of anthropology, and it is extraordinary that such a veteran as Hamy should become entangled in their meshes.

W. H. DALL.

AN ARCHEOLOGICAL FRAUD.

An interesting vase, purporting to be ancient Mexican in origin, was offered for sale some months ago to the American museum of natural history by a collector, and was reserved for possible purchase, and exhibited in the cabinet of that institution. Its grotesque features and the symmetrical and effective combination and arrangement of its ornamentation make it a very noticeable object; but a closer examination destroys the the highly modern character of the handle in design is flagrantly recent. The artist was unfortunate, also, in selecting a crocodile for this conspicuous 'coigne of vantage,' as that great reptile does not frequent the tierra templada of Mexico, and would be only used in art decoration of the aborigines of the hot and lagoon intersected lowlands. The numerous and equidistant circles seen in the photograph on the surface of the cover are fraudulent. The rim of the vase immediately below the cover, upon which the cover rests, is probably a separate piece from the body of the vase, and is too rectangular in its setting on the neck of the same, though very nearly this is seen in genuine examples. Its circular ornamentation is not Aztecan. The body of the vase is very meretricious, if the author of this unique object





first pleasurable impressions by raising serious doubts as to its virtual antiquity. It may be serviceable to collectors generally to call attention to this striking instance of very probable fraudulent work, as it is a most elaborate effort of the potter, and to indicate its points of divergence from the veritable specimens of Aztecan aboriginal workmanship. The piece purported to be pre-Columbian.

Beginning at the top of the vase, the cover almost instantly excites suspicion. It is too symmetrically convex and too cap-shaped, while meant it to resemble true Mexican art. The neck is unnaturally constricted, and the cavity of the vase too globose, in the style of modern ceramic objects of this description. The Aztec moulded the expanded portion or receptacle, in vases of this character, more gradually upwards into the neck, producing a long slant, not a sudden break. The extraordinary collar of masks, which is almost a *chef d'oeuvre* in its way, is a copy immensely improved upon, of similar conceits in genuine antiques, one of which can be seen by New York students in the Metropolitan art museum, in Dr. Lamborn's collection. But inspection detects glaring contrasts in execution and in detail. The triangular entablatures over the masks are too large and too regular, the masks themselves are not after the trigonometrical style of the Aztec potter, and the mustachelike flaps on the upper lips are strangely inconsistent with any claims for the object as a genu-

The expanded flattened chins are

anomalous. The body of the vase, as seen in the cuts, is handsomely ornamented by a face in relief and two semi-disk-shaped annular handles. The face, both as seen in profile and in full view, is not Mexican, and is much too pretty. The fillet surmounting the head should be drawn more closely about the sides of the face, and the Vshaped ends are too large and coarse. The disks attached to the fillet are placed too high, above instead of at or below the ears, and the pendant tassels are abnormally cumbrous. Dr. Plongeon, who agreed with the writer as to the suspicious character of the vase, says that the longitudinal and horizontal bars of these tassels are too few, as they should be respectively five and seven. The handles are very dubious, both from size and ornamentation, while their thin, sheet-like texture is unusual. The legs of the vase are too far under the body of the vase, as in most instances, where present, they sprout from farther up the sides of the object, holding it on inclined supports, and are more usually three in number. The cabalistic ornamentation about and under the vase is significantly coarse and overdone.

The stand, which is seldom found in Mexican pottery, is too elaborate, too highly incised, and false in ornamentation; the markings on its upper surface suggestive of calendar-stones, etc., are simply trifling; and the drop-shaped pellets stuck about it at top and bottom are out of place. The serpents used upon it are wrongly placed; their universal position, I think, being in profile, with usually gaping mouths, while the scroll design between them strikes one as a piece of ingenious but unsuccessful counterfeiting. The whole piece is also too systematically punctured in every part. Since the writer was led to suspect the genuineness of this marvellous production, he has learned from Prof. A. S. Bickmore that Mr. Charnay, in conversation with him, pronounced it a fraud. The aggravated offences so often perpetrated on archeologists by money-making tricksters make it desirable to publish every counterfeit of any importance, both as a warning to the community, of cheats, and as a guide and protection to the less suspicious collectors.

L. P. GRATACAP.

A PETROLEUM STEAMER.

THE petroleum trade between this country and Europe has assumed such large proportions, that cheaper means of transportation than the ordinary plan of carrying the oil in wooden casks or metal cases are desirable. Attempts in this direction have been made by fitting ships with cylindrical or rectangular iron tanks, but to this method there were many grave objections. With cylindrical tanks, no matter how closely packed, the result is, that, allowing for the weight of the tanks themselves, the vessel can carry but little more than half her dead-weight capacity. Rectangular tanks, fitting more snugly together, are better in this respect. But in both systems there is considerable loss by leakage ; and in the spaces between the tanks, inflammable and explosive gases may be generated, becoming a source of danger.

The attention of ship-builders having been drawn to this important subject, the result is, that a new type of steamer has been devised and constructed for the special purpose of carrying oil in bulk. The Gluckauf, the first vessel of the new type, was built at Newcastle-on-Type, to the order of a German firm, and launched last June. She recently completed her first round trip between this port and Germany with a full cargo of oil, and sailed a few days ago for Bremerhaven with her second cargo. The experiment has proved a complete success; and it is stated that other steamers of the same kind, with such modifications of detail as experience suggests, will be built, thus to some extent revolutionizing the oilcarrying trade.

The Gluckauf is an iron steamer three hundred feet in length, and of three thousand tons burden. Externally she has the appearance of an ordinary freight-steamer, except that her smoke-stack is much farther aft, and her half-deck extends forward of the mainmast. Internally she presents some novel features. The coal-bunkers, boilers, and engines are at the extreme stern, in a compartment entirely separated from the rest of the vessel by a water-tight bulkhead. Forward of this bulkhead she is divided into eight oil compartments - four on a side - by transverse and longitudinal bulkheads extending from the ship's bottom to the main deck, two feet above the water-line. From each of these compartments a trunk about eight feet square extends up through the 'tweendecks. These trunks allow of expansion or contraction of the cargo from variation of temperature, and also carry off all volatile gases which may be formed. When loaded, the oil fills the compartments, and extends halfway up the trunks, so that the only surface of oil exposed to

ine relic.