

CHAPTER X.

PHOTOGRAPHY.

By Captain Chapman.

WHEN the Mission was first formed, it was proposed to engage a qualified Native Photographer; as, however, great difficulty was experienced in securing the services of a competent man, the work of photography fell upon the officers of the Mission. Captain Trotter and Captain Chapman provided themselves, through Messrs. Lyell and Co., with $7\frac{1}{4} \times 4\frac{1}{2}$ inch cameras and with chemicals, &c., for the preparation of some 400 plates.

Messrs. Bourne and Shepherd, Photographers, Simla, were early consulted, and the ordinary wet process was adopted; at the same time a certain number of dry plates were ordered from home from the Liverpool Dry Plate Company.

Subsequently, two sets of Professor Piazzi Smith's apparatus for taking small photographs for enlargement were ordered.

Mr. Shepherd, of the Firm previously mentioned, was good enough to devote a good deal of time during May and June 1873 to Captain Chapman's instruction. Both the officers, who have been engaged in photographing, desire prominently to acknowledge the assistance they have received from this gentleman, whose advice they have followed throughout.

It was from the first decided to give up all thought of printing during the travels of the Mission, and the negatives have been regularly forwarded to Messrs. Shepherd and Bourne, by whom the photographs have been printed.

Packing.—The entire equipment was carried throughout the expedition on mules, the boxes containing chemicals, &c., being so regulated as to approximate one maund in weight: with one set, the leather trunks from the Cawnpore Factory were provided with special fittings, and with the other, wooden boxes covered with felt and fitted with wicker cases were employed.

The experience gained during the journey leads to the conclusion that boxes arranged to weigh half a maund each (40 lbs.) would have been more useful and less liable to injury than those of the larger size; four such boxes would constitute a mule load.

Each separate bottle had a covering of its own, and was carefully stowed with cotton wool in its own partition. The greater number of the photographs obtained have been taken with Dalmayer's wide-angle lens, the slide of the $7\frac{1}{4}'' \times 4\frac{1}{2}''$ camera having warped so much under the weight of stereoscopic lenses, which were also provided, as to render them useless.

The total number of negatives obtained is 110.

The ordinary wet process, with proto-sulphate of iron developer and a pushing solution of pyro-gallic acid was employed.

Thomas' collodion in half pints, and Mawson's collodion were both brought into use, the latter being chosen as tending to density in the negative.

Triple crystallised and fused nitrate of silver was specially chosen.

The greater number of subjects being figures, the dry plates furnished with the equipment were not made use of, owing to the long exposure required with them, and as it was nearly always possible to employ the larger cameras, Professor Piazzi Smith's apparatus was not brought into use.

The possession of a certain amount of old proto-sulphate of iron which had become peroxidized was found highly advantageous as assisting the rapid preparation of developing solution when required.

The severity of the winter season and the difficulties attending photography on the line of march need to be appreciated; but in favor of the equipment and the process employed, it may be recorded that some of the negatives were obtained when the thermometer showed many degrees of frost, and that the camera was constantly used after a long march.

The prejudices which exist in all Mahomedan countries against the taking of likenesses were found to be very strongly in force on arrival, and it was only as confidence was established, and in consequence of the liberal policy of the Amir, that it became possible to secure the photographs which have been obtained.