these methods as compared with single crystal determinations. In view of these considerations, we agree that the structure of manasseite, hydrotalcite and of our compound as well may be similar to the recently determined structure of pyroaurite and sjögrenite. With regard to this, Gastuche, *et al.* (1967) and Brown and Gastuche (1967) have proposed a structural scheme for their synthetic hydroxycarbonates which corresponds to the structures recently determined for pyroaurite and sjogrenite. However, our data do not justify the choice of this structure for our synthetic Mg-Al hydroxycarbonate and further data, especially single crystal data, would be necessary to determine the correctness of the structure of our compound.

## References

- ALLMAN, R. AND LOHSE, H. H. (1966) Die Kristallstruktur des Sjogrenits und eines Umwandelungsproduktes des Koenenits (=Chlor-Manasseits). Neues Jahrb. Mineral. Monatsh., 1966, 161-181.
- BROWN, G. AND GASTUCHE, M. C. (1967) Mixed magnesium-aluminum hydroxides. II. Structure and structural chemistry of synthetic hydroxycarbonates and related minerals and compounds. *Clay Minerals.*, 7, 193–201.
- FEITKNECHT, W. (1942) Uber die Bildung von Doppelhydroxyden zwischen zwei- und dreiwertigen Metallen. *Helv. Chim. Acta*, 25, 555-569.
- GASTUCHE, M. C., BROWN, G. AND MORTLAND, M. M. (1967) Mixed Magnesium-Aluminum Hydroxides. I. Preparation and characterization of compounds formed in dialyzed systems. *Clay Minerals.*, 7, 177–192.
- Ross, G. J. AND KODAMA, H. (1967) Properties of a synthetic magnesium-aluminum carbonate hydroxide and its relationship to magnesium-aluminum double hydroxide, manasseite and hydrotalcite. *Amer. Mineral.*, 52, 1036-1047.

## THE AMERICAN MINERALOGIST, VOL. 53, MAY-JUNE, 1968

## MORINITE-APATITE-WHITLOCKITE: A CORRECTION

D. JEROME FISHER, University of Chicago, Chicago, Illinois.

There is a correction which Professor Duncan McConnell of Ohio State University kindly points out should be made in my paper published under the above title in 1960. There on page 655 where the (101) line with d=4.04 (4.08 in Table 6) is considered as belonging to low cristobalite (also see p. 665; Figs. 2D, E; and Tables 1 (V) and 6), he states that this should be the corresponding (111) line of the AlPO<sub>4</sub> isotype of low cristobalite (see A.S.T.M. card 11-500). Similarly it follows that the d=3.37 and 4.28 lines (see the top of p. 659 and Fig. 2G) are the (102) and (100) lines of synthetic berlinite.

The same correction may also be needed in Fisher (1965).

## REFERENCES

FISHER, D. JEROME (1960). Amer. Mineral., 45, 645–667. (1965) Amer. Mineral. 50, 1658–1665.

1060