

the country by the so-called "Skagerak-glacier", and brought to the place where it was found by the latest ice cover moving outwards from the inland.

LITTERATUR

- HOLTEDAHL, O. (1953): Norges geologi. — Norges Geologiske Undersøkelse. Nr. 164. 1118 s. — Oslo.
- HORN, G. (1931): Über Kohlen-Gerölle in Norwegen. — Norsk Geologisk Tidsskrift. Bd. 12, s. 341—362. — Oslo.
- HORN, G. og ISACHSEN, F. (1943): Et kullfund i Skagerrak-morenen på Jæren. — Norsk Geologisk Tidsskrift. Bd. 22, 1942, s. 15—46. — Oslo.
- ISACHSEN, F. (1954): Skagerrak-morenen. — Det Norske Videnskaps-Akademi i Oslo. Årbok 1953, s. 31. — Oslo.
- LINNELL, T. (1936): Om tertiära vedrester av Sequoia-typ i nordöstra Skånes Kvartärformation. — Sveriges geologiska undersökning. Ser. C. No. 406. Årsbok 31, 1937, No. 2. 24 s. — Stockholm.
- MORK, E. (1946): Vedanatomi. 65 s. — Oslo.
- NORDHAGEN, R. (1921): Fossilførende blokker fra Juratiden på Froøene utenfor Trondhjemsfjorden. — Naturen, 1921, s. 110—115. — Bergen.
- RAVN, J. P. J., og VOGT, T. (1915): Om en blok av neocom fra Hanø i Vester-aalen. — Norsk Geologisk Tidsskrift. Bd. 3. No. 4. 32 s. — Kristiania.

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Note on the epidote in green-schists.

BY

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Epidote is a very common constituent in the green-schists of the Caledonian mountain chain of Southern Norway.

The epidote usually forms irregularly distributed patches. It also occurs commonly as narrow veins, as pseudomorphs after plagioclase (gefüllte Feldspäte), and as rounded concretions a few inches to a feet or more in diameter (FOSLIE 1955). Fragments of such epidote lenses are often found in the overlying conglomerates.

In this note I will call attention to a very peculiar distribution pattern of the epidote found in a pillow lava at the Lo farms in the

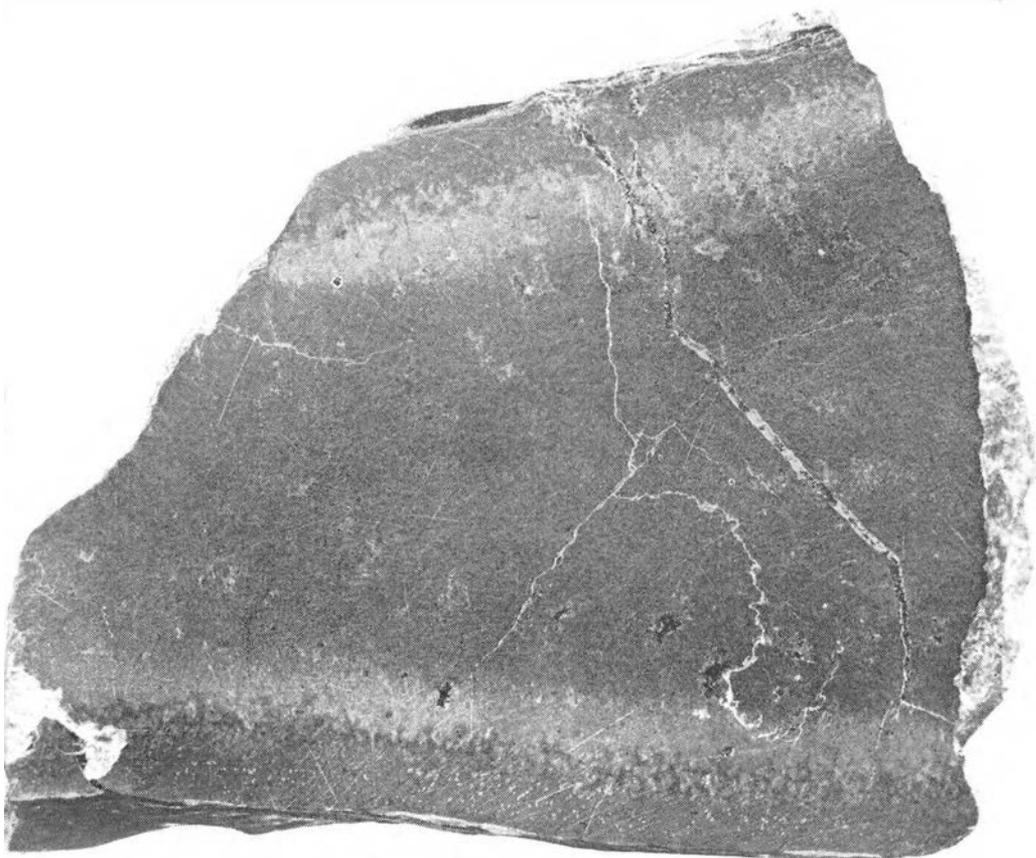


Fig. 1. The epidote zone is parallel to the outline of the pillow. The small, elliptic varioles show clearly up in the marginal zone. The central zone displays a yellow-green colour due to the presence of epidote, actinolite and chlorite. The transition between the central and the epidote zone is relatively sharp. Polished specimen. $\frac{1}{1}$ nat. size.

Løkken field. The picture (fig. 1) shows that the pillow consists of three zones: a *central zone* which abuts sharply against a very pronounced *epidote zone*, which in turn passes gradually into a *marginal zone*. The zone or shell of epidote was exceptionally well developed in nearly every pillow at the locality in question.

Thin sections from a pillow disclose that the texture of the marginal zone is nicely *variolic*. The size of the small, elliptic varioles varies from 0,3—0,4 mm (great axis), fig. 2. The feldspars are slightly

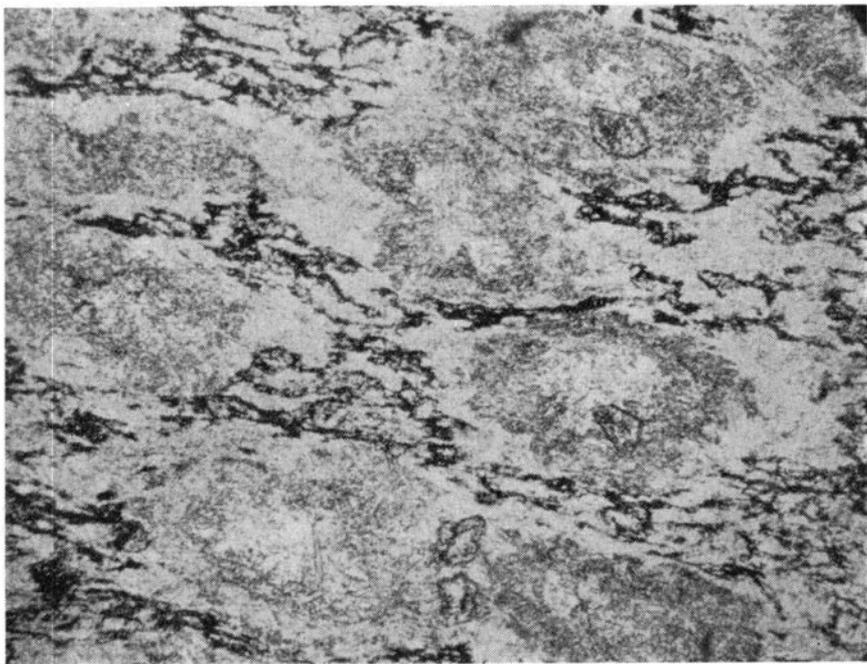


Fig. 2. Thin section from the marginal zone. The ground-mass between the varioles is built up of actinolite, chlorite and semi-opaque matter. The varioles exhibit a concentric texture. 65 x.

sericitized, and single epidote grains are occasionally seen. But as the epidote zone is approached, the amount of epidote increases steadily at the expense of plagioclase. The number of the varioles also increases, and finally they are completely epidotized and so closely packed as to appear as a solid epidote band.

The marginal and the epidote zone, together making up a variolitic zone, is clearly separated from the central *non-variolitic* zone. CARL BUGGE (1910) many years ago was aware of these two zones in many of the pillows in the same district.

To explain the formation of the epidote zone, I will refer to some papers by M. VAUGNAT (1946, 1949). He demonstrates that a differentiation *in situ* has taken place in each pillow investigated by him, giving rise to feldspathic and variolitic border-zones, and slightly more basic non-variolitic central-zones. This is in good agreement

with the present observations. The metamorphism which the lavas in the Løkken field suffered, did therefore not disturb the primary structure of the pillows.

The rocks belong to the green-schists facies: the anorthite component of the plagioclase, not being stable, was replaced by epidote. Since the varioles nearest to the central zone are almost entirely altered to epidote, the composition of the plagioclase in this part of the variolite zone probably was slightly more basic.

In this way the metamorphism has accentuated the magmatic differentiation of the pillows, an epidote band developed in the inner part of the variolitic zone where the small varioles were most densely packed.

Statens Råstofflaboratorium, March 1955.

BUGGE, CARL (1910): Rennebu. N.G.U. Nr. 56.

FOSLIE, STEINAR (1955): Kisdistriktet Varaldsøy-Olve i Hardanger og bergverksdriftens historie. N.G.U. Nr. 147.

VAUGNAT, M. (1946): Sur quelques diabases suisses. — Contribution à l'étude du problème des spilites et des pillow lavas. Schweiz. Min. Petr. Mitt. 26 pp. 116—228.

— (1949): Variolites et spilites. Archives des Sciences. Vol. 2, pp. 223—236.

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***Boeckaspis*, new name for *Boeckia* BRÖGGER 1882,
non MALM 1870.**

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The new name *Boeckaspis* is proposed for a trilobite genus which was given the name *Boeckia* by BRÖGGER in 1882 («Die Silurischen Etagen 2 & 3», Univ. programm 2. Sem. 1882, p. 122, Kristiania), since the name *Boeckia* has previously been given to an amphipod genus by MALM in 1870 (Öfvers. Vetensk.-Akad. Förhandl., vol. 27, p. 543, Stockholm) and also to a copepod genus by BRADY in 1871 (Nat. Hist. Trans. Northumberland & Durham, vol. 4, p. 430).

Type species of *Boeckia* BRÖGGER 1882 and thus of *Boeckaspis* is *Boeckia hirsuta* BRÖGGER 1882.

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