

Some observations in West-Jutland of a polygonal pattern in the ground

By Harald Svensson

Ice-wedges are known from several parts of Jutland through comprehensive investigations of *Aksel Nørvang* (1939 and 1942). As far as is known these investigations represent the first correct interpretation, mentioned in the literature, of these formations in Norden.

Nørvang made his observations on this periglacial phenomenon in gravel pits, where he also was able to follow them over varying distances. In Sweden *Johnsson* has described many ice-wedges, also studied in cuttings (1956, 1962).

When the present writer observed polygonal patterns (possibly of periglacial origin) on aerial photographs from the coastal plain of Halland in South-Sweden (*Svensson* 1962) it was desirable to make a comparative study of aerial photographs from those areas in Jutland, where *Nørvang* had made his observations of continuous crack fillings, in order to get a more certain idea of the true origin of the polygonal pattern in South-Sweden. Because of the greater scale of the Danish aerial photographs they are more suited for this study than the Swedish airphotos.

By kind permission from the *Geodetic Institute* of Denmark the author has had the opportunity to analyse aerial photographs from some areas in West-Jutland, including areas where *Nørvang* has made his observations as well as other parts of the country.

In the examination of the ground conditions on these photographs, there has also been observed a polygonal pattern in the surface from several places in West-Jutland. As the occurrence of this pattern in the ground, so far as is known, is not mentioned or described before in Denmark, it may be worth noting.

The pictures, fig. 1 and 2, are two of the photographs yet examined which most typically reveal a polygonal pattern. Generally the contours are quite indistinct (fig. 3). On the ground it is impos-

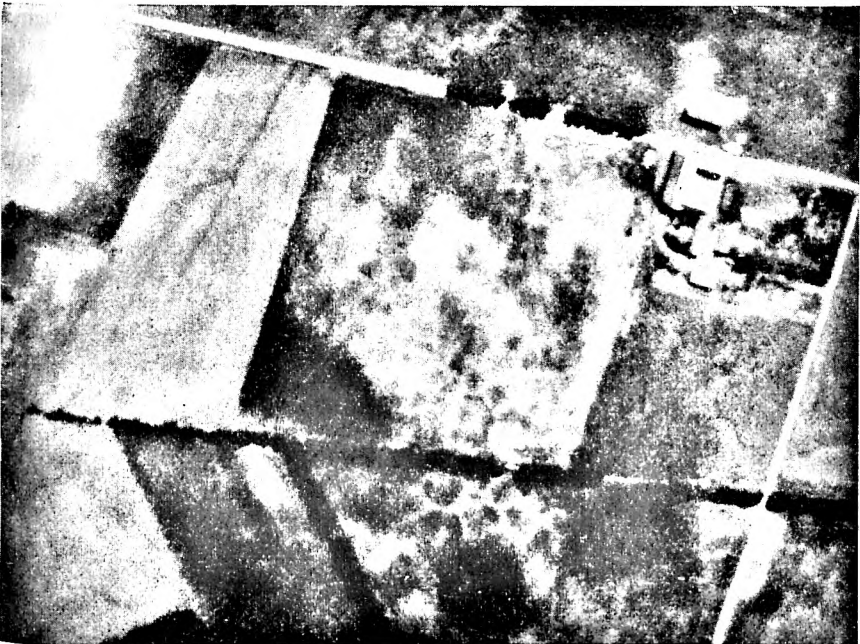
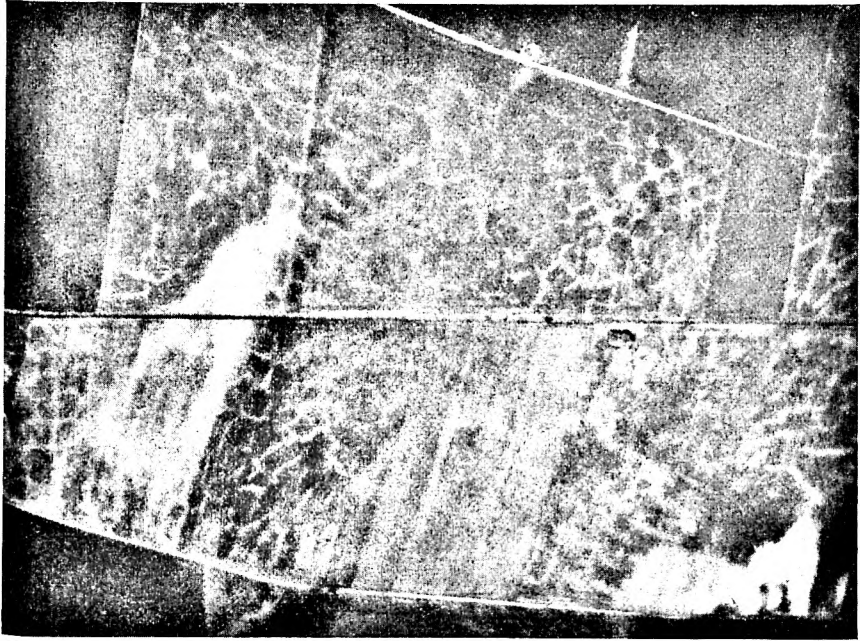


Fig. 1 and 2. Around the village of Videbaek, west of Herning, polygonal patterns appear on vertical airphotos. Approximate scale 1:4500 and 1:3500 respectively. (Enlargement from the original scale 1:10000.)

Geodætisk Institut. Eneret.

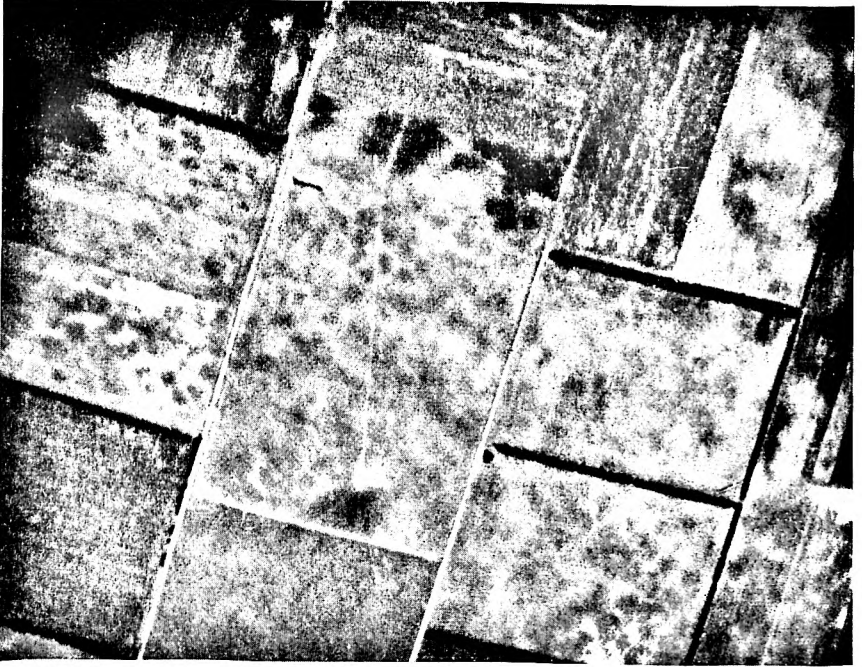


Fig. 3. At the village of Bejsnap, northnortheast of Varde, a faint polygonal pattern is traceable in the ground. Approximate scale 1:3500. (Enlargement from the original scale 1:10000.) Geodætisk Institut. Eneret.

sible (late autumn 1962) to get the conception of a pattern. The areas of the pictures are all situated west of the main stationary line of the last glaciation. Lund, 15. 12. 1962.

På lodrätt fotograferade flygbilder från trakten av Videbaek framträder ett mönster i marken (fig. 1 och 2), vilket har stor likhet med de polygonmönster, som förekommer inom vissa nutida tundraområden. Även i andra delar av västra Jylland, vilka liksom Videbaek-området låg utanför den senaste nedisningens ytterrand, framträder liknande, ofta diffusa mönster. Fig. 3 återger ett sådant område vid Bejsnap.

LITERATURE

- Johnsson, G.* (1956): Glacialmorfologiska studier i södra Sverige. Medd. fr. Lunds univers. geogr. inst. Ser. Avh. nr. 30.
 – (1962): Periglacial phenomena in Southern Sweden. Geogr. Ann. XLIV. No. 3–4.
Nørvang, A., (1939): Stenringe og Frostspalter i Danmark. Naturhist. Tidende 3. Aarg. Nr. 7.
 – (1942): Frostspalter i Jylland. Meddel. fra Dansk geol. foren. B. 10.
Svensson, H. (1962): Ett mönster i marken. Svensk geogr. årsb. Årg. 38. (Summary).