THE METEORITICAL BULLETIN

THE PERMANENT COMMISSION ON METEORITES OF THE INTERNATIONAL GEOLOGICAL CONGRESS

No 2 APRIL Moscow, 1957.

THE FALL OF THE BREITSCHEID METEORITE

Name: BREITSCHEID

The place of fall or discovery: φ = 50°40;1 N ; λ = 8°11;1E. near the small town of Breitsheid, 8 km to the west of Herborn, Dill district, Hessen, West Germany.

Date of fall or discovery: 11 August 1956, between 15:30 and 15:45 European mean time.

Class and type: stone meteorite, light grey chondrit.

The number of separate specimens: 1 (?); it measures 5 x 10 x 15 cm.

Total weight: the initial total weight is assumed to be somewhat less than 1 kg.

The circumstances of the fall or discovery:

the fall of the meteorite was observed as a short, light yellow, somewhat reddish fiery trail. Judging by the broken branches of trees and the aspect of the hole, it may be concluded that the meteorite fell from west to east at an angle of 45°. During the fall, sounds were heard resembling a locomotive letting out steam. No crash was heard. The meteorite was found 30 min. after its fall. The person who discovered the stone thought it must have fallen from an aeroplane that had recently flown past and that it was of no scientific value whatever. The meteorite remained warm for a long time. As a result of striking a stone in the ground the meteorite must have broken into 14 pieces at least.

At the end of September the fall of the meteorite became known at the Max-Plank-Institute ((Mainz,W.G.) of Chemistry. Measures were taken to collect the fragments that it was still possible to find.

Judging by the fragments and also by the depth of the hole it may be concluded that the initial weight of the stone must have been somewhat less than 1 kg.

The fall of the meteorite was seen by Mrs.Reich (who was standing 45 metres from the spot where it fell), Mr.Reich, Mrs.Fork and Mr.Zenzinger. Günter Thielmann took care of the meteorite and reported the fall.

According to G.Thielmann the chemical composition of the meteorite is as follows:

SiO_2	40,83 %	Ni	1,69 %
MgO	27,17	Co	0,37
CaO	2,21	Mn	0,33
Al_2O_3	1,04	P	0,20
TiO_2	0,30	C	0,37
Fe	20,78	S	2,12

The main mass of the meteorite is in the Max-Plank-Institute of Chemistry, where chemical, radiochemical and petrographical investigations are being made. The results of the investigations will be published in the "Geochimica et Cosmochimica Acta".

Sources:

1. A letter written by Prof, F.Paneth (Mainz) to E.L.Krinov dated March 27,1957,
2. A letter written by Prof.E.Preuss (Munich) to E.L.Krinov dated March 23,1957.

E. L. K r i n o v,

Vice-President of the Permanent Commission on Meteorites of the International Geological Congress.

The Committee on Meteorites of the Academy of Sc.,USSR, Osipenko 52, Moscow 127, USSR