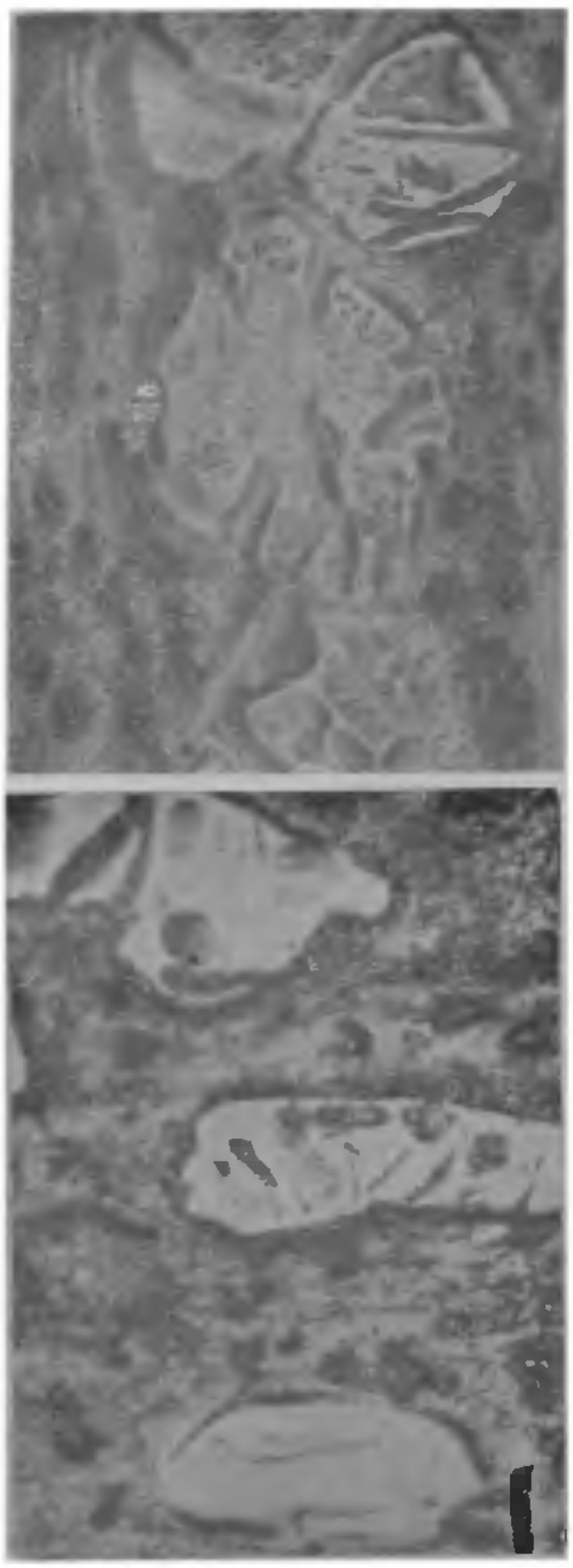
the blocks of coal are usually preserved after thin sections are made out of these, it was decided to study the corresponding polished surface of all the respective blocks under reflected light. By this method, using an oil immersion objective, structural details of all such opaque bodies became clearly noticeable as shown in Figs. 1 and 2. These bodies are rounded to slightly elongated and are mixed in a mass of durain with coal constituents that are related to woody parts of the original



FIGS. 1–2. Ball shaped and elongated bodies of Sclerotioids are shown mixed in a mass of durain. (Polished surface Mag. ×340.)

vegetation. They are further characterized by great hardness, that cause a very pronounced relief in polished section with fibres of vitrinite often turning sharply round them.

As is evident from the figures there are two types of sclerotioids in these coals. The first type are those which are rounded in form and carved into chambers as shown in Fig. 1 and upper-half of Fig. 2. The chambers are either complete or, sometimes, merge in the surrounding mass. The other type of sclerotioid which lies near the lower-middle margin of Fig. 2 is conspicuous by its slightly elongated form and distinct slit-like openings. Dr. Hacquebard in a private communication conveys that these bodies strongly resemble the so-called "carved" sclerotioids encountered by him in the St. Rose coal of Eastern Canada (Hacquebard[2]). Although these bodies have certain likeness with sclerotia, they cannot be called so unless the structure can be observed plainly. The term may resemble these fungal bodies but not necessarily complete equivalence. The origin of the sclerotioids is still a matter of speculation.

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NATIVE SULPHUR IN RECENT SEDIMENTS FROM THE GODAVARI DELTA BASIN

A RECONNAISSANCE survey of the paludal deposits around a village, Pandi, situated in the centre of a tidal channel, south of the Gautami Godavari confluence, revealed the occurrence of native sulphur in recent sediments. An impenetrable jungle of mangrove swamp stretches on either side of the tidal channel, and in this, several semi-dried patches devoid of any vegetation were observed.

These barren patches contain clayey deposits and a more detailed observation revealed that this clayey material is rich in native sulphur at a depth of 6 inches from the surface, whereas

the surficial clay is free from sulphur. The sulphur occurs in the form of yellow massive concentrations perceptible to the naked eye, and under a magnifying glass the sulphur is in the form of yellow, tiny rounded particles.

The tidal channel that surrounds the village, Pandi, represents an environment with free flow of water throughout the year and the swampy area with steady depositions. During high tide, clayey material in suspension and material in solution are transported to the swamp area and clay and evaporites get deposited there.

Analysis of the silt-clay fractions of the bottom sediment from the tidal channel and the sulphur-rich sediment from the swamp for organic carbon (Method of Allison[1]), free sulphur and sulphate gave the results as shown in Table I.

TABLE I

Sample No.	Sample location (see Fig. 1)	Colour	Sulphur	Organic Carbon	Sulphate
1*	Sample at a depth of 6″ from the surface (Mangrove swamp area)	Dark greyish when wet; Light grey when dry	3·01%	0·226%	More
2*	Bottom sediment from the tidal channel	Dark greyish green when wet; Dark chocolate brown when dry	0·75%	1·947%	Much less

* The average of four analyses.

Sulphur in a sedimentary environment can get accumulated from (1) sulphates, (2) sulphurated waters, etc., from fumaroles, and (3) organic matter. The low percentage of organic carbon, the comparative abundance of sulphates in sulphur-rich sample and the absence of any evidence for the presence of fumaroles or hot springs in the area indicate the possible source of sulphur to be the sulphates brought in solution. Unlike in the tidal channel, quiet conditions of deposition and periodic complete evaporation in the swamp facilitate appreciable concentration of sulphates. Ultimately sulphur might have formed by (*a*) reduction of sulphates and (*b*) oxidation of H_2S thus formed by special bacteria. This confirms[2] that the most favourable condition for the formation of native sulphur in a sediment is a reducing environment.

The financial assistance of the CSIR is gratefully acknowledged.

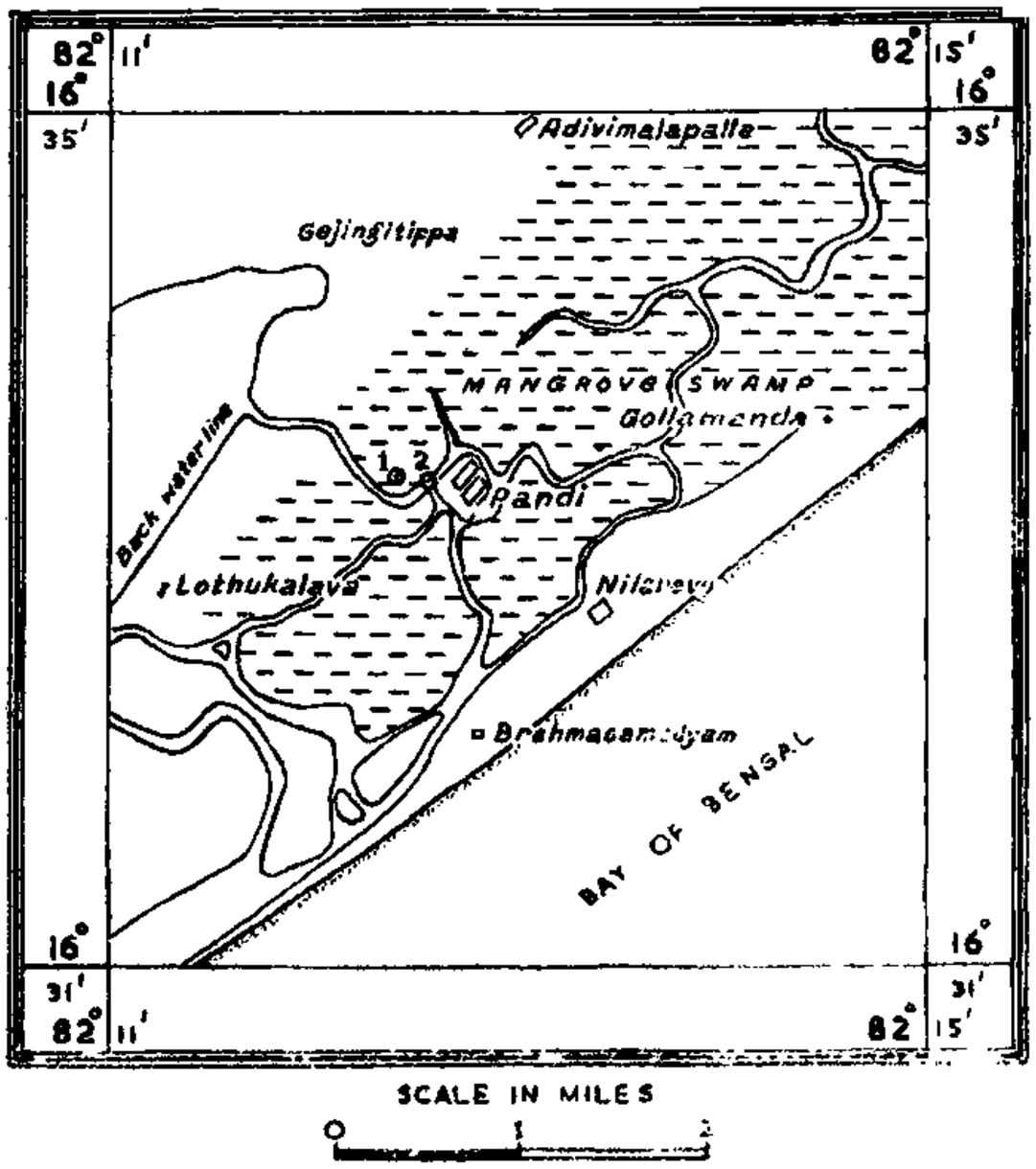

FIG. 1. Location of samples. (1) Sample from Swampy area; (2) Sample from tidal channel.

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NON-EJACULATED SPERMATOZOA IN THE EPIDIDYMIS OF *ANSER MELANOTUS* (AVES, ANSERES)

THE fate of non-ejaculated spermatozoa in the epididymis of birds has not been studied before though observations of this nature have been made in the different mammals.[6-8] It is known that there is no influence in the epididymis which can indefinitely preserve the vitality of mature spermatozoa, which become incapable of functioning after a certain period of ageing.[1]

The present paper gives an account of the various processes of elimination of undischarged spermatozoa left in the epididymis of *Anser melanotus* in the months of April and May after the breeding period is over. The epididymis with a portion of the testis was