Fig. 1. Bagh caves; carved within Nirnar Sandstone overlain by the Bagh Group of rocks.

Fig. 2. Entry to Gallery No. 4 of the caves; Nirnar Sandstone shown at the roof.

Fig. 3. Bagh Group of rocks exposed near Chirakhan.

Fig. 4. Yelam sandy limestone exposed in the nala section near Yelam. The limestone occurs as intercalation within Barwaba Bryozoa Limestone.

Fig. 5. Mohanpura Marl containing fossil bone (x); Man river section.

Fig. 6. Drilling site of the Directorate of Geology & Mining, M.P., near Agarwara.
PLATE 2
Photomicrographs of thin sections (all crossed nicols)

Fig. 1. Granite from the Mun river section.
Fig. 2. Bijawar shale from the Mun river section.
Fig. 3. Nimar sandstone from near Chirakan.
Fig. 4. Nimar shale from near Bagh.
Fig. 5. Nimar gritty sandstone from the Mun river section.
Fig. 6. Ajantar Bryozoan Limestone from Ajantar.
Photomicrographs of thin sections (all x 70), crossed nicols.

Figs 1, 2. Cave Nodular limestone from Badiya; a fossiliferous micrite, with the fossils filled with sparry calcite, in a groundmass of microcrystalline calcite ooze.

Fig. 3. Deola Marl from Deola; a few grains of terrigenous quartz in a microcrystalline calcite groundmass.

Fig. 4. Lameta limestone from northern Deccan.

Fig. 5. Lameta calcareous sandstones with shells of Mviltus from near Chirakhan.

Fig. 6. Deccan trap basalt.
Fig. 1. Sandy Blond croparite from Barwaha Bryozoa Limestone formation; fossil is filled with chemically precipitated open space sparry calcite; the border of the shell is marked with a hematite lining. (x 140) crossed nicols.

Fig. 2. Sandy Biomicrosparite from Barwaha Bryozoa Limestone formation; fossil is filled with chemically precipitated open space sparry calcite. The filling calcite, likely precipitated by the algae itself, aided in the preservation of the fine cyclical pores of the fossil. The groundmass is stained with hematite.

Fig. 3. Pellets in the sandy Biomicrosparite. Plane polarized light x 100.

Fig. 4. Intraclast in the sandy Biomicrosparite in a groundmass of microcrystalline ooze. The vein-filling microcrystalline ooze continues into the intraclast. Crossed nicols x 70.
PLATE I

Fig. 1. Archaeolithothamnium nummuliticum (Gumb) Roth, (p. 83).
1. Section through a crust, x 70.
2. Oblique section of a fragment consisting of perithallic tissue containing some sporangia, x 70.

Fig. 3. Lithophyllum problemsticum sp. nov.: (p. 89)
Section of a crust showing hypothallus of rectangular cells co-axial around conceptacles and horizontal at points peripheral with elongated cells, x 40.

Figs. 4-6. Lithophyllum baghensis sp. nov. (p. 91).
4, 5. Section through a thin irregular crust showing regular perithallic tissue, conceptacles and poorly developed hypothallus, x 70.
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1. *Lithoporella* indica Pal. (p. 94).
   Vertical section showing monostratocentric palisade cells, x 70.

2. *Lithoporella* sp. (p. 97).
   Nearly vertical section showing monostratocentric palisade cells, x 70.

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   3. Nearly vertical section, showing cells arranged in a zig-zag axis, x 100.
   4. Same magnified, x 200.

   5. Vertical section, showing cells arranged on a zig-zag axis, x 100.
   6. Same magnified, x 200.
PLATE 7

Figs. 1, 2. Solenopora baghensis sp. nov. (p. 105).
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Figs. 3, 4. Thaumatoporella (Polygonella) cf. oceidentalis Johnson, (p. 109).
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Fig. 5. Permocalculus budaensis var. pygmea Johnson, (p. 115).
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3. Longitudinal section showing rectangular shape of a segment with rounded corners, x 70.

Fig. 4. *Permocalculus johnsonii* sp. nov. (p. 120).
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PLATE 9

PLATE 9


1, 2. Longitudinal sections, x 70.

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2c. Profile, x 1
2d. Apical system, x 4
2e. Ambulacrum, x 6
2f. Portion of inter-amb. x 6

PLATE 3

Pigs. 1 a-d. Stereocidaria (Dorocidaris) namadica (Duncan), (p. 274).

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1c. Part of ambulacrum, x 6
1d. Portion of inter-amb., x 3

Figs. 2a-f. Salenla Keatingi Fourtau. (p. 276).

2a. Superior face, x 1
2b. Inferior face, x 1
2c. Profile, x 1
2d. Apical system, x 4
2e. Ambulacrum, x 6
2f. Portion of inter-amb. x 6.
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3. H. (0) subsimilis (Fourtau) /Figs. 3a, 3b, 3c./ in Fourtau (1918).
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Hemlaster (Opissaster) subsimilis (Fourtau) (p. 298).

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5b. Inferior face.
5c. Profile.
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6a. Superior face.
   (All x 1)
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<td>Fossilised jaw of some Vertebrate animal occurring in the Mohanpura Marl formation.</td>
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<td>2</td>
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