of a body-cavity, which are of the utmost value. He adopts a more detailed nomenclature than I have used here, and does not take the same view of the water-vascular system of flatworms as I have done; but to some extent there is naturally coincidence, due to the fact that the material here used in the form of facts has been mainly drawn from his other writings and those of other German and Russian embryologists. I have not attempted to discuss Professor Häckel's views nor referred to his terms, chiefly because the substance of this paper was drawn up before the 'Kalkschwämme' appeared.

XXXVI.—On a new Australian Species of Thyrsites.
By Prof. Frederick M'Coy.

The common Barracoota of the Cape seas is very abundant in the Melbourne market from the adjacent coast, and has long been known; but an equally large and important species for food is brought in great quantities from Tasmania to the Melbourne fish-shops, usually split open and dried; and, as far as I can see, it has been overlooked by naturalists. It is easily distinguished at a glance from the Thyrsites atun or Barracoota by the much greater depth of the body, fewer finlets, shorter dorsal, larger teeth, and double lateral line; but the mode of preparation usually obscures the still more striking character of the ventrals being almost absent, or at least very minute and rudimentary. I subjoin a description of the species.

*Thyrsites micropus* (M'Coy).

D. 17 | 4+12 | VI.  A. 2+11. IV.  V. 1+1 (bifurcate).

P. 14.  C. 22\(\frac{1}{4}\).

Height of body five times in total length to centre of caudal fin; head four times to end of lobes of caudal. Lower jaw projecting in advance of the upper; diameter of orbit one fifth the length of the head, and one half the length of the muzzle. Ventrals each with one spine and one bifurcate ray, slightly in advance of base of pectorals; about one third the diameter of the eye in length. Lateral line bifurcate: upper branch extending from a little above the operculum, a little below the dorsal line, as far as the third finlet; lower branch coming off from upper one under base of fifth dorsal spine, and descending with an abrupt curve nearly to the middle of the side, continuing nearly straight to opposite middle of anal fin, from which to middle of tail it describes three upward undulations.
Colour brilliant lead-grey, whitish below; fins brownish. Surface of body smooth, with very minute scales imbedded in the skin.

<table>
<thead>
<tr>
<th>ft.</th>
<th>in.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total length</td>
<td>2 6(\frac{1}{2})</td>
</tr>
<tr>
<td>Length of head from chin</td>
<td>0 8(\frac{1}{2})</td>
</tr>
<tr>
<td>Length of pectoral</td>
<td>0 3(\frac{1}{2})</td>
</tr>
<tr>
<td>Greatest height of body</td>
<td>0 6(\frac{1}{2})</td>
</tr>
<tr>
<td>Greatest height of first dorsal fin</td>
<td>0 2(\frac{1}{2})</td>
</tr>
<tr>
<td>Diameter of orbit</td>
<td>0 1(\frac{1}{2})</td>
</tr>
</tbody>
</table>

There are about sixteen compressed teeth of moderate size (about 2 lines) on each intermaxillary, and a group of three on each side of the upper jaw in front, very large (about 6 or 7 lines) and curved backwards. As in Gempylus, the ventrals are so reduced as to be scarcely visible; but there is a row of seven or eight small conical teeth on each palate-bone, as in Thysites. T. prometheus, T. Solandri, and T. prometheoides, all have the ventrals reduced to one small spine; and the latter Amboyna species has also, according to Bleeker, the double lateral line; but the proportions of the head and body and number of the fin-rays completely distinguish the present fish from them.

The popular name is Tasmanian kingfish.

Melbourne National Museum, January 30, 1873.


[Continued from vol. vii. p. 436.]

[Plates VII., VIII., IX., & X.]

1335. Agaricus (Armillaria) aurantius, Schäff.; Fr. Ic. tab. 27.

Varying a good deal in the nature and frequency of the scales. One or two of the specimens exactly accorded with the figure of Fries.

1336. A. (Tricholoma) pessundatus, Fr. Ic. tab. 28.

Street, J. A. Clark, Esq., Oct. 1871.
Smell like that of new meal.

*A. (Tricholoma) sordidus, Fr. Ic. tab. 45.

On the naked soil in gardens, as at Coed Coch.