

It is surprising that if the fumigation time is reduced to one eighth (from twenty-four hours to three hours) only a four times higher dose is required, which is not in keeping with Haber's law ($c \times t = K$).

Five kgm. of methallyl chloride was evaporated, by pouring it on to flat dishes, in a gas chamber of 70 cub. m. capacity, containing bags of wheat and maize with *Calandra* species, bags of peas with *Endrosis lactella* Schiff., cases of currants and apricot stones with *Ephestia elutella* Hb. and *Paratipagularis* Z., and also bags of cow hair with *Lermestes* species. At the end of twenty-four hours the gas was drawn off by suction. All the insects were killed. The temperature was 20° C.

A cocoa storage loft of about 150 cub. m., infested by tens of thousands of larvæ of *Ephestia elutella*, the cocoa moth, was treated in the same way at a temperature of 14° C. All the larvæ were exterminated.

In these tests, special attention was paid both to the influence of the gas upon the smell and taste of the gassed products and its toxicity to mammals.

As a soil insecticide, methallyl chloride was also used. Larvæ of the cockchafer were killed by a dose of 25 gm. per sq. m. distributed in four holes.

The great majority of plants are not damaged by methallyl chloride.

A detailed publication on methallyl chloride is being prepared and will be issued shortly.

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¹ U.S. Dept. Agric. Bull. No. 1313.

Pterinopecten papyraceus and "*Strophomena*" *pecten*

LINNÆUS, in the tenth edition of "Systema Naturæ" 1758, p. 702, described a species *Anomia pecten* in these words: "A. testa semi-orbiculata depressa multistriata; valvula altera plana (List. angl. 243, t. 9, f. 49). Testa inferne f. margine cardinis linea recta f. transversa". No locality was given, but a specimen is contained in his cabinet at the Linnean Society, London.

Lister's figure, cited by Linnæus, is of a specimen "ex fodinis carbonum Fossilium juxta Hallifax", and is quite recognizable as *Pterinopecten papyraceus* (J. Sowerby, 1822) known to occur in the Halifax Hard marine band of the Coal Measures. The above description could be held to apply to this shell. By a strict application of the rules of nomenclature, J. Sowerby's specific name would appear to be invalidated by Linnæus's previously erected species.

On the other hand, there is no doubt that Linnæus had before him Swedish Silurian brachiopod shells long known as "*Strophomena*" *pecten* Linn. Knowledge of the typical form was spread by personal contact among the Swedish palæontologists, and the first figured specimen of '*S.*' *pecten*¹ is probably conspecific with the specimen still preserved in the Linnean cabinet.

This confusion seems to arise from a difference of method. Linnæus presumably only intended to show the general appearance of his shell to other workers, not to establish a type specimen.

Since *Pterinopecten papyraceus* is a common shell, cited in European literature for more than a hundred years, strict interpretation of the rules would lead to

confusion. Therefore I am applying to the International Committee for Zoological Nomenclature for a suspension of the rules in this case, so that the specific name *pecten* Linn. can be retained for the Silurian brachiopod.

Other of the Linnean species are similarly referred to figures which do not represent the species in the modern interpretation, for example, such a common fossil as *Atrypa reticularis*, and if the rules are suspended in this case, a precedent will have been set up for the retention of those Linnean species at present doubtful.

If the rules are suspended, and '*S.*' *pecten* Linn. is retained, I propose to figure and describe the specimen of '*Anomia*' *pecten* in the Linnean cabinet as the neotype.

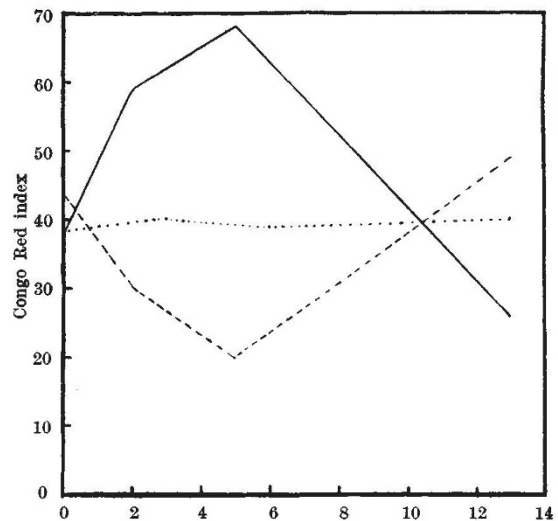
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¹ Dalman, Kogl. Vet. Akad. Handl. for 1827, 110 (1828).

Restropic Activity of Blood

We have previously described the extraction from the anterior pituitary of two substances that affect the activity of the reticulo-endothelial system^{1,2,3}. One (negative restropic factor) lowers the functional level of the reticulo-endothelial system, the other raises it (positive factor). We have now found that fresh blood (from rabbit or horse) also contains a positive restropic substance. It can be prepared by the methods already applied to extraction of anterior pituitary³. We have not yet found any difference, chemical or biological, between positive restropic extracts from blood and pituitary respectively.



ACTIVITY OF THE RETICULO-ENDOTHELIAL SYSTEM. BLOOD EXTRACTS FROM NORMAL SUBJECT (FULL LINE), CASE OF MALIGNANT DISEASE (BROKEN LINE), AND CASE OF CHOLELITHIASIS (DOTTED LINE).

The experiments have been extended to human blood. Samples of venous blood were obtained from healthy subjects and from various clinical cases. Each sample (5.0 ml.) was immediately extracted by a method previously described³, deproteinization