If we suppose, as seems entirely justifiable, that the initial dry weight of the *cotyledons* alone was approximately the same in the two series, it then follows from the last column in Table II that at the end of the period of soaking the cotyledons of the intact seeds of Lot A had absorbed 0.2184 gr. of water, or 13.75 per cent of their assumed initial weight, while the shelled cotyledons of Lot B had absorbed 0.5188 gr., or 32.7 per cent of their initial weight. This is a complete paper.

[1] Pearl, R., and Allen, A. L., *J. Gen. Physiol.*, 1926, viii, 215-231; Pearl, R., *Am. Nat.*, in press.

[2] Terreine, E. F., Trautmann, S., Bonnet, R., and Jacquot, R., *Bull. Soc. Chim-Biol. T.*, 1925, vii, 461-473.

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Ocular Manifestations in Anaphylaxis.*

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In our experiments with guinea pigs, in which anaphylactic symptoms were induced either by subjecting sensitized animals to a dust-laden atmosphere or by parenteral injection, we have noted that there also occurs, in some cases, a suffusion of one or both eyes.

This suffusion at first is thin and watery, rapidly becoming thick and creamy, and in some cases eventuates in the eyelids becoming matted together. This suffusion lasts for half an hour and sometimes longer.

These symptoms were manifested more frequently in sensitized animals exposed to dust than in those animals injected parenterally. These manifestations were not observed in animals which died rapidly in anaphylactic shock, accounting for the greater percentage of positive results in those exposed to the dust.

Out of a total of 523 positive anaphylactic experiments, 53, or 10.1 per cent, showed these ocular symptoms. Symptoms were noted in 15.3 per cent of the dust inhalation experiments, 8.3 per cent of the experiments with intravenous injection, and 4.5 per cent of the experiments with intraperitoneal injection. (See table.)

* This work is being carried on under "The Crane Fund for the Study of Anaphylaxis."

TABLE I.
Ocular Symptoms in Positive Anaphylaxis.

Positive Anaphylactic Exp.		Ocular Symptoms			Per cent Ocular Symptoms
Method	Number	One eye	Both eyes	Total	
Cage*	157	6	18	24	15.3
Intravenous	322	3	24	27	8.3
Intraperitoneal	44	—	2	2	4.5
Total	523	9	44	53	10.1

* Cage indicates exposure to dry dander dust.

These figures indicate that this symptom is of comparatively infrequent occurrence.

An animal showing this eye symptom and recovering after one anaphylactic response may manifest a similar eye reaction during a second or third anaphylactic reaction.

Further, an animal manifesting this eye symptom after dust contact may subsequently manifest it after an intravenous injection. An interesting example of this was the case of only one animal in which a suffusion of the right eye occurred upon contact with horse dander dust, and when subsequently injected intravenously with horse dander solution, it again showed suffusion in the same eye.

This symptom must undoubtedly be of an anaphylactic nature and not a local irritative one, because we obtained the reaction from exposure to the dust and after intravenous injection of dander solution.

Vernal conjunctivitis, an eye condition usually occurring in children, and possibly some other forms of conjunctivitis of unknown etiology, may have some relationship to anaphylaxis. In a recent publication by Lehrfeld[1] a series of cases of vernal conjunctivitis was reported with positive allergic skin reactions to pollens, feathers, etc. This investigator suggests that this disease is of an allergic character.

There may be some relationship between the symptoms we have described in the guinea pig and such conditions observed in the human being.

This is a complete paper.

[1] Lehrfeld, L., *Am. J. Ophth.*, 1925, viii, 368-373.