

than gratifying, and although I began its use with the same feeling of skepticism that my past experience had warranted, I am compelled to admit that the results to date have not only been encouraging, but in some instances remarkable. It is true that the season is still young, and I may have occasion to alter my views, but this year's experience up to the present writing is extremely satisfactory. In my own case it has been possible for me to continue my daily routine, even indulging in long automobile rides into the country and in other outings with little more discomfort than during other seasons. It is necessary to use the remedy, not only when the slightest irritation in the eyes or nose presents itself, but if possible to anticipate these symptoms by using it before exposure.

Pollantin can not be said to be a cure for hay fever, except in the sense that it is an antidote to the pollen toxins, which antidote must be applied in sufficient quantities, and sufficiently often to overcome the repeated exposures to the toxins.

Concerning the editor's note as to the proprietary nature of the remedy, it is unfortunate that this is true. Professor Dunbar himself deplores the necessity for this, but in a personal communication to me stated that without some such safeguard, remedies purporting to have the same virtues would be, and in fact had been, placed on the market to the detriment of a valuable agent and his own reputation.

ROBERT LEVY, M.D.

FALL RIVER, MASS., Aug. 8, 1906.

To the Editor:—I have read with interest the letter from Dr. Ingals in *THE JOURNAL*, Aug. 4, 1906, touching the question of the treatment of hay fever with pollantin. I have no contribution to make on the subject of the use of pollantin except reports which have been made to me by my private patients, for I have not personally administered it to them, but as hay-fever patients tell one another everything new in the way of remedies, and usually try them all, whether the physician prescribes them or not, I have found a number of my own patients to have used pollantin without regard to any advice from me, and so far as I know, with entirely negative results.

Hay fever seems to me to be a vasomotor neurosis, with a good many causative factors, as it appears all the way from early May or June until frost. I have found the discharge or the condition fairly well controllable by some simple measures adapted to the individual case. If possible, previous to the attack, I get the nose in as good condition as possible, so that the resulting swelling will be less troublesome than it would be if occurring in a naturally very narrow naris. I do not think, however, that in a susceptible patient, nasal surgery necessarily prevents the attack, and do not so promise patients. When the attack is on, remedies which lessen the nasal congestion with the least amount of subsequent reaction, are the best for local use. I have found adrenalin or powdered suprarenalin useful, adrenalin, however, in no such strong doses as is advocated in the literature of the various houses who make it or similar compounds. Solution of adrenalin chlorid I have found most useful in strength of about 1/14,000 in some neutral diluent, as normal salt solution, or some one of the alkaline antiseptic nasal washes. Aristol has seemed to me par excellence, the best nasal astringent I have used. It can be used straight in a powder blower by the physician or the patient, or combined with small doses of powdered suprarenalin or with small doses of stearate of zinc, or one of the compounds of stearate of zinc and menthol, according to the discretion of the individual physician.

As an internal remedy I think nothing equals belladonna, given in the form of either an extract of belladonna or of atropin in dosage sufficient to produce a sense of dryness in the nose or throat, and then the dose diminished or given at much longer intervals.

For the suffusion and itching of the eyes, argyrol (I regret to say that this is also a proprietary remedy, but it seems to work well; possibly other silver compounds would do as well) in from 10 to 20 per cent. solution, a drop or so in the corner of each eye, seems to work remarkably well.

Under the above plan of treatment, individualized for the particular case and carried out strictly under the supervision of the physician, I find that my patients get through the hay-fever stage with a considerable degree of comfort, and can be treated at their work without the need of going away from home.

GEORGE L. RICHARDS.

A New Phenomenon in Color Conversion.

MINOR, N. D., Aug. 1, 1906.

To the Editor:—I wish to make some suggestions in connection with the Stevens' phenomenon, inasmuch as no entirely satisfactory explanation has been given, and with the hope that some element in them will lead to a further understanding of these color changes. I make the following observations on the figures illustrating Dr. George T. Stevens' article in *THE JOURNAL A. M. A.*, July 21, 1906:

1. Fix the eye on one of the red corner blocks in Figure 1, and as the red band disappears the block on which the eye is fixed will be the last to be turned green.

2. While carrying out No. 1 another phenomenon may be obtained, namely, that all the green squares inside the red band may be converted to red.

3. It will be found easy to suppress the red band in Figure 1 if the eye is fixed on one of the outer green squares.

4. The red inside of the green band in Figure 2 can be converted into green, but it is more difficult than a similar trial with Figure 1.

5. Make a square opening in a sheet of paper so that it will just inclose the red band in Figure 1 and cover the green field outside. Fix the eye on either a red or a green square, and all will become red.

6. Place a lead pencil dot in the outer third of the green in Figure 3, and fix the eye on or beside the dot, and the entire field will be made green. I could not accomplish this completely if the dot was on the red.

7. Place a dot midway between Figures 1 and 2 on the page and fix one eye on it. The phenomenon may be observed in both figures at the same time.

The above observations contain some points of interest which it may be well to note. Fixation on some particular point in the field aids in producing the changes. I was unable to accomplish a result with Figure 3 until a point of fixation was added. In No. 5 it is demonstrated that the colored band is enough predominant over the inclosed squares to produce the phenomenon and in No. 2 it is seen that this may be obtained before it is overshadowed by the greater predominant field of color with the production of the typical phenomenon. It will be most easily recognized at the moment the band begins to change, or just as it is coming back. In the seventh an interesting point comes to notice and would suggest the falsity of Stevens' principles of explanation. We here see the phenomenon present in both figures, at the same time eliminating the red from Figure 1 and the green from Figure 2, and a clear green and a red field persisting.

To see if the accommodation could play any part in the phenomenon, the following experiments were made: *a.* I paralyzed the muscle of accommodation in one of my eyes with atropia and the phenomenon was observed as before. A plus lens was used. *b.* A patient was taken who had one eye under atropia for three weeks, and the lens added. He had observed the phenomenon with the good eye previously, and at once induced it with the paralyzed one. *c.* As a final test I took a patient whose cataractous lens had been removed five weeks before, and with a correcting glass could read large print. He said he could obtain the phenomenon in Figure 1, but not in Figure 2.

From these experiments and observations the conclusion may be drawn that accommodation is not a factor in the production of the phenomenon, and with its elimination we may also exclude the difference in refraction of the various colored rays as an element in its explanation.

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