

the following solution, which can be applied with a sponge :

Distilled water.....	150 ccm
Citric acid.....	1.2 grammes
Salt.....	5 grammes

The paper, after thoroughly drying, can be sensitized by being allowed to swim for two minutes on a bath composed of

Distilled water.....	150 ccm
Silver nitrate.....	16 grammes
Citric acid.....	12 "
Alcohol.....	12 "

On account of the presence of the acidulated silver, the paper dries very red, and before being toned must be very well washed; to the second washing water soda should be added, in order to neutralize the citric acid. This paper can be toned in a platinum bath, or if a warmer tone be desired the following gold bath may be used:

Water.....	2 litres
Sodium acetate.....	12 grammes
Calcium chloride.....	30 "
Gold chloride.....	1 gramme

Fixing may be done in any ordinary bath, or in an acid fixing bath, and a good washing must follow. Very rough paper must be very carefully handled in the baths, so that the film of the picture does not suffer.—*Chronik.*

PHOTOGRAPHERS' SOAP.—The only agent which is at all effectual in removing stains produced on the hands by silver salts is cyanide of potassium, but the use of this body is very dangerous on account of its poisonous qualities, especially when the skin is injured. This danger, however, disappears to a great extent when the cyanide is mixed with soap. Being very unstable, the cyanide of potassium cannot be added to the hot soap in course of manufacture, and it has to be mixed with the soap by reducing the latter first to slices and then to powder, and then grinding it with from 10 to 20 per cent. of its weight of the cyanide. The mixing must be done thoroughly and at the same time rapidly, and at as low a temperature as possible, so as to reduce the decomposition of the cyanide as low as possible. The product is sold either in powder or cakes, wrapped in lead-lined paper.

Optical Department.

In charge of W. E. HAMILL, M.D., Inspector of the Optical Institute of Canada, 60 Yonge street, Toronto.



Correspondents should note that for an intelligent answer to be given to their inquiries it is necessary in every case to give the following information relative to their patient: (1) Sex, (2) age, (3) occupation, (4) near point of distinct vision for small type with each eye alone, (5) how their eyes trouble them, i.e., their asthenopic symptoms, (6) vision of each eye at twenty feet alone without glasses, (7) best vision obtainable with glasses, naming correction.

Example.—J S, male: age, 18; book-keeper; can read small type to within five inches of each eye; complains of much headache through the day and evening; eyes feel sore and water a good deal, look red and inflamed, etc., etc.

R.E.V. $\frac{3}{80}$ with + 1.50 = $\frac{3}{80}$

L.E.V. $\frac{3}{80}$ with + 1.50 = $\frac{3}{80}$

The above example is taken to illustrate about how we desire inquiries to be made.

L.H.B., London, Ont.—Should one always be able to obtain as good vision with glasses as with the pin hole disk?

Ans.—Broadly speaking, yes. Usually and frequently you can do better by absolute correction than with the pin hole, although sometimes we are forced to be content with less than the pin hole shows.

A dearth of questions allows an opportunity to present some unusually interesting results.

An old lady from whom I removed a cataract over three years ago recently called to have her glasses changed—her

V. was $\frac{4}{80}$ with + 10.00 = +.50 eye, axis 15 V. = $\frac{3}{80}$. Note the small amount of astigmatism and the good vision obtained with glasses. Immediately after the operation the cylinder correction was + 2.75.

An old lady 68 years old who never wore cylinders required + 2.00 S. = + 4.50 cyls each eye; accepted the same comfortably from the first.

A lady 49 years old had a V of $\frac{3}{80}$, every letter, and a near point of 8 inches. This certainly is an anomaly from that taught in text-books. If you can explain it let me hear from you.

Can you answer the following questions in the affirmative—if not you are behind the times:

(1) Do you own—use and understand Johnson's measuring blades?

(2) Have you got a Geneva lens measure?

(3) Is Hardy's refraction rule your guide in presbyopia?

(4) Do you understand and practise retinoscopy?

(5) Have you read Thorington's new book on "Refraction and How to Refract?"

Local.

The following students have just completed a primary course in optics under Dr. W. E. Hamill at the Optical Institute of Canada, viz.: Albert Scarff, Montreal; R. J. Hutte, St. Catharines; Luther Hunt, Brockville; Geo. A. Woodhouse, Hamilton; James McNeilly, Niagara-on-the-Lake; H. H. Ramage, Toronto; T. H. Trimble, Toronto. The following graduate opticians took up retinoscopy, viz.: Mrs. Thos. Fletcher, Brussels; T. H. Trimble, Toronto; W. R. Bishop, Chatham; W. H. Goodger, Woodstock; A. McMillan, Ottawa; Miss M. McCarroll, Meaford. Next primary class March 12th.

We draw attention to Dr. Hamill's advertisement, under the head of the Canadian Drug Exchange, to some unusually inviting openings and drug businesses for sale by him. The doctor informs us that he is constantly being asked by bona fide purchasers to pilot them into desirable stocks for sale. His address is 11 King St. West.

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