values. It may fairly be concluded that provided the energy distribution of a given test object is roughly matched by choosing a suitable colour filter whose computed scotopic transmission is known, an experimental comparison of the test object with the filtered light will give the scotopic value of the test object with satisfactory accuracy, probably to within \( \pm 12 \) per cent., except possibly for red test objects. This is true provided the photometric match is made at a scotopic brightness of about \( 5.0 \times 10^{-4} \) e.f.c. (4 mm. diam. pupil) and the result is the mean for at least two "normal" observers.

**Acknowledgement**

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**ANNOTATION**

Social and Medical Problems of Phlyctenular Disease in Dublin

This is the title of the Montgomery Lecture, given by Dr. J. B. McArevey, in Dublin on May 3, 1944; in which the author reviews the historical, medical, social and statistical aspects of the problem. Speer in 1822 found "a vast and complicated mass of disease" among the poor, which perhaps was more abundant than in any city of equal size and population in Europe. He attributed the high incidence of disease to social conditions, especially poverty and overcrowding in the slums. Strumous ophthalmia was first reported in Ireland by Ryan of Kilkenny in 1824. Two years later Isaac Ryal gave Ireland its first accurate description of the disease.

Dr. McArevey concludes that the results of his study demonstrate "that basically phlyctenular disease is a manifestation of malnutrition. It is a disease of the poorer class—those whose main source of food is bread and cereals, and from whose diet the essential proteins necessary to growth and normal development are practically absent; the only source of these available to most of them is milk, and that only in limited quantities—in many cases, in the form of free milk. As a necessary concomitant, the affected children suffer from a low grade malnutritional anaemia, with a deficiency of some of the essential vitamins. It is difficult to see how it could be otherwise, in view of the results of my social enquiry, and the facts elicited by the statistical investigations, which reveal the disturbing conclusion that the incidence of the disease, omitting the temporary increase due to the war conditions, has not radically changed since Ryal's day. At this stage one cannot fail to recall his clinical
observations, when over a century ago he attributed this form of
disease to 'the want of a due proportion of animal food.'" His
summary of the medical investigations shows the sex incidence
similar to that of the majority of observers in other countries.
Average weights and heights in the phlyctenular children examined
show no gross deviation from the normal, apart from a greater
development in the male, both in weight and height, than in females.
The diet was mainly cereals, a low milk consumption and green
vegetables were used by only 50 per cent. Apart from milk, in over
50 per cent. cereals were the only source from which proteins could
be obtained. There is an almost complete absence of eggs, cheese
and fish, and a complete absence of bacon, from the diet.

There was a deficiency of vitamin C in 28.57 per cent. of the
group investigated but no deficiency in vitamins A and B2. There
was radiological evidence of rickets in 36 per cent. of the group
investigated. Associated illnesses showed a high incidence of
measles and whooping cough, a lower incidence of pediculosis than
the Dublin school children and a high incidence of cutaneous
infections, tonsillar sepsis, dental caries and gland infection. The
evidence of tuberculous infection is given under such headings as
positive tuberculin tests, radiological evidence, contact and sanatoria.

"The nature of the tissue reaction of the phlycten points to an
allergic reaction. The high proportion of positive tuberculin
reactions points to the tubercle bacillus or its products as the most
possible source of the antyin."

Those who are interested should read the full paper which will be
found in the July No. of the Irish Journal of Medical Science,
1944.

Dr. McArevey's condemnation of the cereal diet would hardly
have commended itself to the Rev. Patrick Brontë, who, we are told,
had grown to heroic proportions on potatoes and saw no reason why
his children should fare differently, so they always had potatoes for
their dinner; but he was not born and bred in an overcrowded
slum in Dublin but in the country and perhaps got more milk,
eggs and even bacon than the children of this investigation."

We commend this admirable paper to our readers.

ABSTRACTS

MISCELLANEOUS


(1) In a discussion at the New York Society for Clinical Ophthalmology Julianelle emphasized the stages of hyperaemia, neovascularization, follicle formation and papillary hypertrophy as merely