

CONSERVING VISION

PROPER ILLUMINATION TREATED  
(BY MAJOR C. F. ADAMS.)

Faulty light, too much or too little or from the wrong direction are all sources of discomfort. I remember not long ago a school girl, fourteen or fifteen years of age, consulted me for headache and distress about the eyes. I found that she had a retinitis and suggested that it was due to faulty light. She quickly remarked, "It can't be that; we have a Welsbach light of eighty candle power and the room is as bright as day." My diagnosis was confirmed.

Glare is very trying; the light should never strike the eyes in front or be reflected from glazed paper. Did you ever observe in the summer time how one squints while reading in the open, under the trees or in a boat? That is caused by glare. One can read with much more comfort with the light coming from the side while indoors because the walls of the room cut off the extra rays of light and prevent glare.

Artificial light. The problem to be considered in lighting systems is not so much the procuring of a bright light, but a light that will give the greatest efficiency for a period of three or four hours of work with the least fatigue to the eye.

The important factors in this problem are the evenness of the illumination and the diffuseness of the light; the angle at which the light falls on the object viewed; evenness of the surface; the brightness; intensity and quality.

The ideal condition with regard to distribution is to have the field of vision uniformly illuminated, with the light well diffused and no extremes of surface brightness.

We use today four systems of lighting systems and semi-indirect lighting systems. At present in the proper illumination of a room by sunlight, we have been able to get the best conditions of distribution. Before it reaches our skylights, sunlight has been widely diffused by innumerable reflections and the window and skylight themselves, acting as sources, have a broad area and low intrinsic brilliancy, all of which features contribute toward giving the ideal condition of distribution stated above, namely, that the field of vision shall be uniformly illuminated with light, well diffused and that there shall be no extremes of surface brightness.

Of the systems of artificial lighting, the best distribution effects, speaking in general terms, are given by the indirect systems. In that type of system the source is concealed from the eye and the light is thrown against the ceiling or some other diffusely reflecting surface in such a way that it suffers one or more reflections before it reaches the eye. This system, in some respects most important to the eye, gives the best approximation of the distribution effects characteristic of sunlight of any that have been devised.

ROYAL WELCOME

WINSTON-SALEM HAS OPENED  
DOORS TO SOLDIERS.

If there should ever be a call for soldiers at Winston-Salem again every soldier now stationed at Camp Greene would be eager to make the trip. Stories have come back to the camp from the forty-first guards, the ordnance men and others stationed at Winston-Salem, of the most wonderful treatment from the people of that city.

Sergeant Marcel Frank carried 900 copies of The Caduceus over to Winston-Salem on last Saturday and had plenty of time to look about the place as his supply was sold out in two

VISIT ATLANTA.

Sergeants Simon Hyneman and Arthur Merriman have returned from a trip to Atlanta, Ga., where they accompanied a number of patients.

SEES ASHEVILLE.

Sergeant First Class Tate of the registrar's office is with us again after a short absence occasioned by a trip to Asheville, N. C., with two discharged patients. On his return trip the sergeant made a short stop at his former home at Waynesville.

The direct lighting systems are designed to send the light directly to the plane of work. Bright, rather than a diffused light are obtain with the attending glare that is irritating to the eyes.

The semi-indirect systems are intended to represent a compromise between the direct and indirect systems. A part of the light is transmitted directly to the eye, through the translucent reflector placed beneath the source of light and a part is reflected to the ceiling. This method cannot compare in efficiency with the indirect light.

In tests for loss of efficiency, when the intensity and quality of the light are equalized at the point of work, the eye loses practically nothing in efficiency as the result of three or four hours' work under daylight. It loses enormously for the same period under the system of direct lighting selected for our work and almost as much under the system of semi-indirect lighting. Under the indirect system the eye loses little more than by daylight.

The effect of quality of light on the eye has been the subject of much discussion and much misunderstanding. There is a popular belief that a colored light gives better results for seeing than a white light; some holding that the kerosene flame furnishes the ideal source of light. The color of light is not as important as the quality and amount. The student lamp, burning kerosene, won its reputation over gas, its only competitor at the time, by being a steadier light, free from flickering and more readily adjusted.

The  
Citizens  
National  
Bank

C. B. ARMSTRONG  
President

A. G. MYERS  
Active Vice-President

W. H. ADAMS  
Cashier

Gastonia, N. C.

RESOURCES  
\$2,000,000.00

Checking Accounts Welcome

Everybody's Going  
to the

LIBERTY  
DANCE

TO BE GIVEN

Friday Evening, Dec. 6

AT THE

AUDITORIUM  
UNION  
ORCHESTRA

Dancing from 8:15 to 11:30  
Moonlight Waltz at 9:30

Gentlemen 50c. Ladies Free.

ALL MODERN DANCES  
Finest Dance Floor in  
North Carolina