in the mouth. The degree of abrasion, if any existed, was measured by determining the depth of any cuts or grooves found. A study was also made of the relationship between the condition of oral hygiene and the presence, or absence, of abrasion.

The results show that only a small percentage of teeth with 0.5 mm of exposure were abraded, whereas a very high percentage of those with 1.0 mm, or more, exposure showed some loss of the dentin. Therefore, it appears that 1.0 mm of exposure is critical in the sense that it permits considerable wear if the subject practices average oral hygiene. In the age groups 20–29, 30–39, 40–49, 50–59, critical exposures existed on one or more teeth in 58 per cent., 84 per cent., 96 per cent. and 94 per cent. of the subjects, respectively.

The incidence of some extent of abraded cementum and dentin increased with age from 42 per cent. to 76 per cent. The percentage of subjects showing wear greater than 0.5 mm deep increased from 4 per cent. in the age group 20–29 to 42 per cent. in the groups above 40 years of age.

An excellent correlation was found between the thoroughness of oral hygiene and the occurrence of abrasion. In those portions of the mouth where toothbrushing was most thorough, and among those people with the best oral hygiene, the incidence of abrasion was the highest and on the other hand, where poor oral hygiene was observed very little abrasion was noted.

The influence of age and oral hygiene on exposure and abrasion of cementum and dentin has been briefly summarized here. It is planned to present this data in detail at a later date along with a discussion of the effect of sex and the position of the tooth in the mouth on exposure and abrasion.

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## THE EFFECT OF CHLOROFORM ON SOME INSECT BITES

DUE, in part at least, to economic factors the control of mosquitoes and biting insects is not always feasible or practical. Nevertheless, this state of affairs affords little consolation to the susceptible individual who must live and work where these pests abound.

In 1924 the writer noticed that cotton saturated with carbon tetrachloride rubbed briskly on mosquito bites caused a rapid cessation of pruritis. Later chloroform was substituted, and found superior. Since then similar trials have been made on a number of individuals, including several physicians. It was felt that the testimony of the latter would add some degree of validity to these rough tests.

The arthropods concerned in these tests were the local red bug, *Trombicula sp.,* the mosquitoes *Culex fatigans* and *Aedes aegypti,* the prevalent black fly, *Simulium quadrivittatum,* and the gnat, *Culicoides furens,* a most annoying species common along the coastal plain of the island.

In all instances the results confirmed initial observations. Usually a more beneficial effect was experienced if treatment were not too long delayed. Nevertheless, a physician whose entire body surface was covered with mosquito bites after a trip to an adjacent island, condescended to try chloroform on a limited area approximately 48 hours after incurring the bites. The relief was so marked that he soon applied the drug on a considerably larger scale.

The dermatologist may present objections to the use of chloroform as a counter-irritant. Of course this substance must be kept from the eyes and mucous membranes. In all tests made no effect other than a transient burning sensation was noted. In one instance a woman long affected with angioneurotic edema, and very susceptible to mosquito toxin, used chloroform to obtain relief over a period of several months. The objective was attained without causing any noticeable change in the edematous condition.

The tests indicated here are obviously not critical ones. It is believed, however, that sufficient evidence has been accumulated to justify calling attention to the palliative potentialities of chloroform against the toxins injected by mosquitoes and other noxious arthropods. It deserves a trial for flea bites and schistosome dermatitis, provided of course, the areas involved in the case of the latter are not too extensive.

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## PRESERVATION OF SAMPLE AREAS IN THE NATIONAL FORESTS

I WOULD like to make a brief reply to Dr. Henry I. Baldwin's communication in SCIENCE for June 27, 1941, in which he condemns my criticism in a communication in SCIENCE for May 2, 1941, of the failure of the U. S. Forest Service to preserve in the National Forests sample areas exhibiting the finest development of the different types of our primeval forests.

Dr. Baldwin asserts that reservations of "really valuable timber" (whatever that may mean) "have been made by the Forest Service in a large number of cases."

Now what the Forest Service has done and is doing is not a matter of argument but of fact and of record. Either such reservations in the National Forests exist or they do not. If they do, do they contain optimum or near-optimum stands of the wonderful forests of the western United States;—forests unequaled anywhere else in the world, whose unique scenic magnificence as well as scientific interest demanded that adequate areas of the finest stands should be preserved?