common and which are exposed to additional exogenous factors of possibly carcinogenic nature (solar rays, tar), ultimately may undergo malignant changes. Haagensen reported the occurrence of an epithelioma of the temple caused apparently by a prolonged friction of the frame of spectacles (1 case). According to observations made by the same investigator, the friction and pressure exerted by the frame of eyeglasses acted in similar fashion in bringing about a cancer of the bridge of the nose in seven cases and cancer of the ear in two cases. Two similar cases of carcinoma of the face caused by ill fitting spectacles were reported by Morton. Stout mentioned the occurrence of a carcinoma of the skin of the lower leg beneath a garter, and Koelsch stated that Mexican mule drivers suffered from scrotal cancer resulting from the friction of the saddle. A bilateral development of a cutaneous carcinoma of the chest at the site where crutches exerted pressure and caused friction was noted by Ullmann.

While such malignant sequelae in the skin as the result of prolonged friction represent exceptional and sporadic phenomena, similar reactions have been seen under corresponding circumstances among domesticated animals. Thus, horses develop hyperkeratoses and calluses in places where there is pressure by the harness. Heller reported the occurrence of cancer of the lower lip in horses at sites of pressure and wounds caused by the bridle. Oxen and buffaloes in India show sometimes a cancer at the base of the right horn where the wooden yoke presses down (Wirth), while such a reaction has not been observed at the left horn which remains free from the yoke (Fibiger).

II. FROST-BITES

Hyde once stated that outdoor life in cold regions does not predispose, apparently, to cutaneous malignancy as skin cancer is rare among the inhabitants of Iceland, Greenland, Faroe Islands and among the Eskimos. There exists, however, a certain amount of more recent clinical and experimental evidence suggesting that frost-bites may serve as a focus of subsequent malignant developments (Fischer-Wasels; Magnussen). Haagensen cited three cases of skin cancer which allegedly developed on the basis of previous frost-bites (a basal cell cancer of the temple was found in a sailor, 78 years old, who said that he had frozen his face several times 38 years previously; a gardener, 68 years of age, developed a basal cell carcinoma of the external ear, which had been frozen 15 years previously and which had shown occasional crusting during the last twelve years; a shipping clerk, 72 years old, had a squamous cell carcinoma of the external ear, which appeared after a frost-bite sustained two years previously and followed by persistent scaling). Von Brunn reported four skin cancers following frost bites among 227 cutaneous malignancies affecting the skin of the extremities. Wainwright mentioned a basal cell carcinoma of the external ear developing in a driver, 62 years old,