

being discovered. I might also say something about the crags, canyons and waterfalls, and the breath-taking scenery in such mountain resorts as Banff, Jasper and Waterton Lakes. However, on this occasion I will leave those things aside, and talk briefly about highway traffic accidents.

Every year 2,500 persons in Canada lose their lives through highway traffic accidents, as a result of which friends are saddened and homes left desolate. On every long weekend we read in our news columns of some 50 or more persons having been killed on our highways, and several hundred injured. The injured add to the already congested hospital accommodation, and many suffer considerable pain, to say nothing of the expense to themselves. It is interesting to note that 10 per cent of traffic injuries result in permanent partial disability.

Traffic accidents are the sixth major cause of death in Canada today, and it is particularly amazing to learn that they are the most common cause of death among persons of 28 years of age and younger.

The responsibility for this devastation of life and limb is failure of material or of personnel. Failure of material involves bad road conditions, bad weather and poor visibility, mechanical defects of the automobile, and so on. However, generally speaking, the present-day automobile is a pretty reliable machine, and most accidents occur when weather and road conditions are good. So it would appear that in the responsibility for accidents the personal element is the more important one; and that includes violation of highway warnings and traffic regulations as well as the physical or the mental condition of the driver.

Speeding is the most common cause of trouble; it is a factor in 30 per cent of the accidents. There is something peculiar about speeding because the field of vision is narrowed in direct relationship to the speed of the car. A person standing still or in a stopped car has a peripheral vision of about 180 degrees. If he is going at 40 miles per hour the field of vision is narrowed to about 70 degrees, and at about 60 miles per hour it is narrowed to, say, 40 degrees, so he can see only what is ahead of him in a narrow way; and under those conditions if he turns his head for a split second he travels a considerable distance without seeing where he is going. Then there is such a thing as high-speed hypnosis, which means that a driver going at a fast rate of speed does not react as quickly as he should. As the stopping distance of a car increases in direct ratio to increase in speed, a driver travelling fast and unable to react promptly in an emergency

may go into a ditch or over an embankment, or collide with a post or another car.

One driver out of every fourteen involved in a fatal accident has some physical defect. He may be suffering from want of sleep after long hours of driving, or from fatigue due to emotional disturbances, or it may be that he has taken too large a dose of the tranquilizing drugs which are used so commonly at the present time.

Alcohol also is a cause of impairment, both of drivers and pedestrians. The fact is that in about one-quarter of the number of accidents in this class alcohol is one factor. It is not easy to tell whether a person is impaired by alcohol or not. There are some tests, such as smelling a person's breath, or asking him to walk along a chalk line or to tell the time to the exact second, but those methods are not exact. The way to tell is to determine the percentage of alcohol in the blood. That is not a very easy thing to do, but at present some sensitive instruments are being devised for determining the alcoholic content of the blood by testing the breath. If the content is from .05 to .15 per cent a person is perhaps all right, but if it is more than .15 per cent his judgment is interfered with and he is liable to react very slowly in case of an emergency.

There are some people who have a proneness to accidents. The explanation is hard to find, but it is a fact that some people are involved in accidents quite often.

It is interesting to observe just how injuries are caused in a highway accident. If a fast-travelling car strikes an obstruction, the car stops but its occupants keep on going and, if not thrown out, are hurled violently against hard objects in the car. The driver, for instance, may be flung against the steering wheel or the dashboard. If he strikes the steering wheel he may sustain fractured ribs, and if thrown against the dashboard he may receive abdominal injuries, such as rupture of the liver, spleen or kidneys. His face may be dashed against the windshield, resulting in fractures of the facial bones, lacerations or even unconsciousness.

There is another factor: if a body is going violently in any direction and is suddenly stopped, the head keeps going, and this causes the so-called whiplash injury which we see quite often. Those who served on the "hanging committee" last year will understand the mechanism of this. When the head goes forward, backward or sideways, damage is caused to the upper vertebrae or discs; a vital centre can be affected, and instant death may result from these whiplash injuries.

What we must think about in these cases is a safety device which will do something