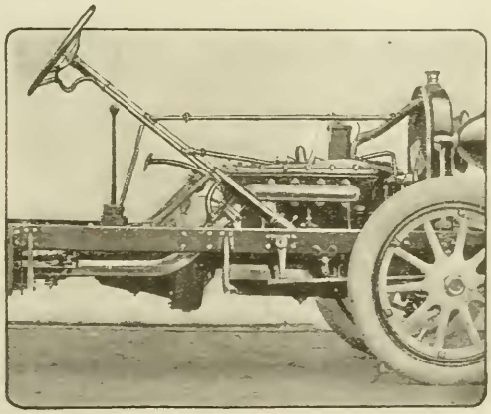
The Steel-Plated, Helmeted Knight of the Trenches

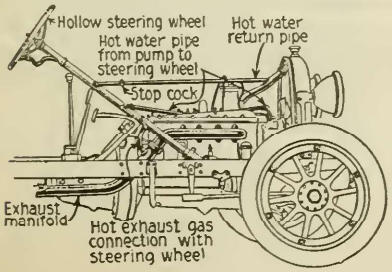
BACK in the Middle Ages the doughty warriors went to battle fully armored. In times of impending danger, the knight's squire must have spent about a half day getting his master into his trappings.

Beside the exhibit of ancient armor stands a modern British Tommy. He too, is steel-plated. And thus does progress move in circles. For armor is coming back into use again.

At all times the wearing of armor is limited by three principal conditions; the weight of the type available, the kind of weapons and ammunition in use by the enemy, and the degree of movement expected of a soldier. If the weight is too great, the soldier soon tires; if the enemy is using high-powered guns at close range, armor is of little use; and if a soldier must run about, steel appendages are in the way.

Steel helmet and chest-covering of the modern British soldier on left make him resemble knight in armor of old (right)





Warming the steering wheel with water from the radiator tank. At left is shown how the water and the exhaust gases can be utilized for this purpose. At right is shown the wheel arrangement by which the hot water circulates through the rims

Use Your Hot Radiator Water to Keep Your Steering-Wheel Warm

THE happy idea of utilizing the boiling water in the automobile radiator and the red-hot gases from the engine for keeping the driver's feet warm, has already been presented in the POPULAR SCIENCE MONTHLY.

Charles C. Walker, of Utah, has now finished this job by devising an arrangement for similarly warming the chauffeur's hands.

The hollow interior of the steering wheel is connected across a part of the circulation system of the engine. By means of a pair of valves, the flow of the hot water can be regulated to give a delightful warmth. Hands were meant to be warm and radiator water to be cold. This idea benefits both ways.

If the water is too hot to be controlled easily, the exhaust engine gases can be used.