I often put water into my tank, as it collects all grit and rubbish into the funnel, and I can thus keep it clean.

I sent the idea to one of the largest English makers, and invited him to use it free of charge, as my experience of patents for the amateur has been very bad, but as they seem quite indifferent I am making a present of the idea to motorists at large. I see no reason why the fitting should increase the cost of a car more than a few shillings, as the publication of this article will prevent any patents being applied for.—A .Foster, New Zealand.

The Dash for the South Pole.

PARTLY BY MOTORS.

Lieutenant Shackelton, who is to be shortly in Antarctic Latitudes making for the South Pole, has explained his plans. He says :—

"For our attempt to reach the South Pole with sledges, we are taking Siberian ponies and a motor car. The ponies, of which there will be six or eight, are to be shipped to Lyttelton from North-east China. Their work will be to draw the sledges. We will take some dogs down with us but not for the journey to the Pole. A pony drags as much as eighteen dogs, and consumes only 11lb of food per day, as against 36lb of food required by eighteen dogs. You will see this means a great saving of food on the journey.

"The motor car will be used as far as possible to relieve the ponies on the first stage of the dash for the Pole. It is level ground, and the motor, which has been specially designed for us by the Arrol-Johnston Company, of Paisley, should be able to negotiate it. Alcohol will be used instead of petrol, and special arrangements are to be made for keeping the engine hot.

"The motor will drag a row of sledges, while the ponies walk on ahead. There will be only three men in the party—one driving the car and the other two travelling on ski. We ought to cover twenty-five miles a day in this fashion. The ponies would keep about two hours' journey ahead of the man in the car, and choose a route for him. Every 110 miles a sledge will be dropped with its load of provisions and a depot formed, so that there may be a line of retreat right from the very farthest south back to our winter quarters."

A Simple Warming Arrangement.

May 1st, and getting cold. Motoring people will be glad to learn that a suggestion has recently been made for using the warm air in the proximity of the engine for warming the occupants of the front seat. The idea was to separate the floor boards, leaving a space of suitable width, and to suspend a baffle or deflector from the back floor board in such a way as to divert the warm air, which passes through the bonnet and underneath the car, up between the floor boards and into the space between the dashboard and the front seat. When a rug is used this warm air fills the space underneath the rug, rendering the front seats very comfortable in cold weather.

Motors First—The Rest Nowhere.

Last January a correspondent, who is much interested in the motor car, wrote :—

"To see motor cars—of not abnormal power—literally ploughing their way through snow up to the axles, as was the fact during the Yuletide holidays, was an object lesson in the superiority of motors over horse traffic."

Skidding Experiences.

Winter is the time for skidding—any high or rough country the place. When the combination is strong the experiences are the reverse of colourless. A correspondent writes :—

I shall never forget my feelings of astonishment when my first car, a small high runabout with smooth tyres, turned round suddenly and faced the opposite way. We were driving on wet wood blocks on the level. The car repeated the performance, describing a huge figure eight from kerb to kerb, on the same road, on another occasion during rain. There was no damage done, although the wheels (wire) fetched up with a shock against the kerbstone. My next bad skid was on ice. I was driving a powerful petrol car, 36 h.p., on a frost bound road. All four wheels were fitted with Grose non-skid bands. A farmer's cart obliged me to run off the crown of the road where there was snow, the rest of the road being rough ice. As soon as two wheels touched the snow the direction of the car was changed. The front wheel ploughed up the bank, and struck a glancing blow at the wall. The back wheel at the same time struck the bank, and the shock was somewhat distributed, the result being two bent axles, straightened at the cost of £8, and a damaged front tyre. My last skid was the most serious. I was driving a large car weighing some 25 cwts. down a hill on granite. The driving wheels were fitted with Desclée non-skid bands. A tramcar was sighted some eighty yards below on a single line, and I moved to the left. The car skidded. I got it straight; it skidded again, and the tram driver pulled up, but my car swung completely round, and the left hand hind wheel swung into the front of the tramcar with sufficient force to project my only passenger on the back seat out of the car into the front portion of the tramcar, where he cut his head. The tool box on the step was smashed to atoms, the car body was seriously damaged, tension rod, etc., broken, and the tramcar was sufficiently punished to require assistance in surmounting the hill. As there was a cemetery handy, I left the car in a shed, and got my passenger to the doctor in a cab. He was sitting at the time of the collision with his hands in his pockets. The granite was so greasy that it was difficult to stand on it with my golfing boots on. Luckily, I am insured, but it is evident to prevent skidding, non-skids should have projecting rivets, and not smooth steel bands. On ice, these smooth steel protectors are a source of danger. I have had my car stopped on a hill with the driving wheels spinning round all the time, polishing the ice still smoother. On greasy granite and wet tram rails they are as dangerous as smooth tyres. I have been motoring for four years, and am hoping to do without horses eventually; but living 950 feet above the sea level, in a very hilly district, I have not yet found a non-skid that I can depend on for winter work. If one could screw studs, blunt or sharp, to suit the weather conditions, into a strong non-skid band, as one does into horses' shoes, the motor car may be depended upon. Can any reader make a suggestion that will enable me to get rid of three hungry harness horses, and use to the fullest extent two powerful cars ?

Frost and Water Cooling.

The long foreshadow of winter ought to make motorists think of things :—*inter alia* of the fact that water at the moment of freezing expands. Messrs. Rolls & Co. circularised owners in the United Kingdom last winter in a manner so much to the point and so generally applicable that we hasten to reproduce their counsel for the benefit of motorists as a body, more especially of those who travel in Central Otago, or roam the Canterbury Plain, or journey in the Northern interior about the Hautapu Valley, Taihape, Waiouru, or follow the Taupo-Napier road, and skim through the Rotorua Country.

1. Be sure that before starting the engine the water system is at least sufficiently filled to cover the upper plate (*i.e.*, fill the radiating tubes).

2. In case of the slightest chance of frost all water should be drained from the system by the cock provided.

3. In refilling the system in cold weather always use hot water. This should melt any ice formed by the freezing up of any water lodging or cementing the pump to its casting.

4. In case of the slightest likelihood of frost, take care not to turn the engine round until the hot water suggested has been put into the system.

5. The water in the cooling system should be prevented from becoming acid, either by frequently changing the water, or by addition of a small amount (say a handful) of common washing soda, otherwise the ironwork or electro metals may be dissolved or corroded away.

6. Should the pump stop through the bearings seizing or some foreign substance getting into it, the car need not be stopped, as the water can still flow through the pump, and as long as the water system is nearly full, even of boiling water, the cylinders will be sufficiently cooled for all ordinary purposes.

British Motor Cars.

£15,000,000 IN WAGES.

More than £8,500,000 was subscribed by the English public for motor car and associated ventures last year, and the outlook for British makers has never been brighter.

British motor cars to value of £3,500,000 were sold during the twelve months. Continental competition has at last been met successfully, and the British cars are now more than holding their own.

Some interesting figures have been compiled showing the present position. There are now 250,000 men engaged in motor occupations, 120,000 motor cars (tyre value at about £4,800,000) on British roads, 813 motor omnibuses in London, 157 motor makers in the London Post Office Directory.

More than 5,000 omnibus horses disappeared from the London streets last year. There has been a decrease of nearly 500 in the number of horse omnibuses licensed, and an increase of 565 motor omnibuses.

There are now twenty newspapers, weekly and monthly, in London devoted to motor topics.

In the county of London there are 21,000 registered cars, £25,000 having been spent on driving licenses last year.

The amount paid in wages to the 100,000 chauffeurs, and the 150,000 men employed in various ways in the motor industry, is estimated at over £15,000,000 for the year.