

grips firmly. By means of a double leverage device the clutch can be manipulated with the lightest possible touch on the foot pedal, thus doing away with all the strain and tiring effect of pressing against heavy clutch springs.

Every detail of refinement for the comfort of those using the car is considered, and the important point of reducing discomfort from road vibration is thoroughly overcome by means of three point suspension, the two long road springs being connected at the rear of the frame by a third transverse spring, this system greatly minimising vibration throughout the car, and making the back seats even more comfortable than the front seats, if possible. In addition to this, Napier Road Equalisers are fitted to all road springs which eliminate

exception of one or two other firms all are quite experimental in many cases not yet even having run on the road.

The Practical Man and the Technical Press.

It sometimes happens that some matter-of-fact person who is without any appreciation of anything that is not intensely practical, finds fault with the technical press because from his way of seeing things, it is not technical enough. This sort of

the technical press, I think of it as the mental eating houses of the people. Not hotels, understand me, but boarding houses. The hotels more nearly represent the book stores where you call for what you want, pay for what is furnished to you, and, if your pocket book will stand it, get the dyspepsia and such things.

If the boarding house is in the lumber woods it will set a different table from what one will, say, in the centre of New York but in any case it furnishes food to suit the general run of people who board there. If it does not it loses its boarders. Even in the lumber woods men will leave one job and go to another because the board they have been getting is not to their taste.

There is one other peculiarity with boarders. The man who does the most kicking and growling is the dyspeptic, and the chances are that he is eating entirely too much meat and other concentrated food. When the man who fills up on vegetables is not suited he hunts another place and just quietly drops out, but the other fellow stays and kicks and sets up to represent the valuable part of the world.

Beyond the choice of the things that are furnished is the way they are prepared and served. Good cooking and nice, clean service is of the highest importance to most people, and there is no excuse for anything else that pretends to be fit for public patronage.

There are fads and fads, and the fellow with a fad is the kind of a fellow who will make the most noise. Here is a fellow who believes in taking his food raw. He wants all his information in formula.

Here is the fellow who believes that the meat eaters rule the world, and that because some of the greatest of the world's workers are also great meat eaters, therefore everyone should stuff with meat. He would burden the weakling with the food of the giant and wants every man to take a technical course whether he can digest it or not.

Here is the fellow who thinks the stomach should be saved from most of its work, and be fed with predigested food. He wants all information reduced to the kindergarten level.

And here, worst of all, is the fellow who thinks that what he does is the only thing and that all should be guided in their eating by his tastes. He is an insufferable boor in any boarding house, either mental or physical.

The wise boarder is a customer of the kind of a literary boarding house that most nearly supplies his wants as he sees them. He makes use of the articles which appeal to his taste, and leaves those that do not, and generally prefers the abundance of vegetables which are easily digested to the concentrated foods. It takes so much more care to properly consume the latter, and if carelessly done serious trouble is more apt to follow than with the more bulky material.

Naturally, we expect the mass of articles in any trade paper to pertain to the things that interest the people of that trade, just as we expect the food of a country to be composed largely of the products of that country, but even here we find it is well not to be too narrow in the matter, for all sorts of tastes are to be satisfied.

What sorts of things is it that the ordinary fellow remembers and remarks about? Is it the profound one that may really contain a germ that is to revolutionise the world? Question him closely and the chances are that he did not read the learned article at all, but he can tell you all about the device that was used to make some job a little easier and surer or the way in which some one made an emergency repair under adverse circumstances. He understands the "roast" that some fellow gives to some sister trade, and is set to thinking by the one that is handed back in return.

The trade paper is something that is meant for regular use. It comes at intervals and sets up such a variety that we all can get something from it to suit our taste. It is not necessary to eat the entire bill of fare to get a fair return for our money, nor to read articles that are not interesting or profitable to us just because we have paid for the paper.

There is one thing that each one has a right to expect and that is that every thing is presented in a proper manner. Coarseness should not have a place in any literature as it ranks with poor cooking.

I have gone somewhat out of my way to give my ideas on these matters, for the reason that I hear some of the talk that comes from the fellow who would "scientific" everything so that it was as dry as dust, and I don't want him to make so much noise that you may think he is everything. I do not want to miss my "vegetables" when I read *Wood Craft* even if I do wonder a bit what sort of pattern-maker puts three legs on a long table such as Mr. Rowley shows. I give it credit for three. The one coming between the fitter's feet must be near the centre on that side, and my imagination paints one at the far end of the right side. I cannot quite decide whether it is orna-



THE RUSSELL CHAR-A-BANC OR OPEN MOTOR 'BUS.

all sudden jolts, and in fact cause the car to glide over the roughest roads, thus greatly minimising the fatigue of travelling.

The use of the Napier Transmission, which has been so freely copied recently, is adhered to in this chassis. This transmission, which was introduced by Mr. Napier in 1902, has the third or top speed directly driven from the engine crankshaft to the differential axle, without the use of any loose gear wheels. Thus not only is the maximum power of the engine transmitted to the road wheels, but the necessary noise of intermediate gear wheels is entirely eliminated. The transmission shaft and differential run on ball bearings, and the road wheels are mounted on specially designed double ball bearings, which are practically frictionless.

On this particular chassis the drive is transmitted to the road wheels by means of a shaft, but whether this form of transmission or the chain-driven type is used, the price remains the same.

A further Napier refinement is the solid aluminium dashboard, which has many advantages over the old-fashioned wooden or painted dashboards, which crack and warp with the heat of the engine, and are soon spoiled by the oil and grease with which they are often smeared. This aluminium dash is easily cleaned, cannot warp, is not affected by heat, grease, or weather, and always looks well.

The few points given above are amongst the numerous interesting features and refinements which will be found on this chassis, which, together with the well-known advantages which are obtained by the use of a correctly-designed six-cylinder motor, such as Flexibility, Silence, Efficiency, Reliability and absence of Vibration enables it to be justly claimed for this six-cylinder Napier chassis that it is one of the most up-to-date and perfectly constructed chassis of the year.

The fact that over seventy manufacturers of all nationalities are now noticing the six-cylinder Napier by starting to experiment with and build six-cylinder cars is sufficient proof that the six-cylinder Napier is in advance of many motors at present built.

Above all, it is well to remember that good as is the six-cylinder principle at present with the

man is strictly utilitarian. He looks on the human element in the world as so many machines for grinding out work. Judging from observation with him everything that does not fit into his peculiar methods of thought and of work are excrescences which should not be allowed, and if by any chance they should appear he considers that he is doing his fellow men a kindness in promptly trying to suppress them. A formula is his delight as being the only proper way of expressing any technical information that can be expressed by one, and he is ready to take issue with the man who uses a figure or a letter unnecessarily even there. When the formula cannot be made to express the desired information it should then be put into some other condensed form.

There is a sort of food that is sometimes used for certain kinds of conditions. I am not sure of the proper designation for it, but I understand that it is composed of meat and vegetables which have been dried and pressed to such an extent that a few ounces contain all the chemical valuables which were in many pounds of the original substances in their natural form. This is the ideal of what the technical press should be to some people. It is well known that meat is a concentrated food, and that turnips, cabbage, beets, watermelons and most other vegetables are very bulky in proportion to the nourishment the scientific man finds in analysing them. Perhaps it is a mistake, and some day some reformer will lead us from the error of our ways but at present it must be admitted that most of us like to have a liberal quantity of vegetables along with our meat, and so far as I know the extremely compacted food is only used by those so situated that it is not possible to get any other kind. It is kept and only used in an emergency when no other kind is available.

To my mind this concentrated mixture well represents the formula. The meat might be said to be a representation of the strictly scientific article. The vegetables naturally stand for the literature which has not a very high scientific value but which is consumed in large quantities because it tastes good, and makes people feel good after it is taken.

Wishing to pay the highest compliment I can to