Napier Alpine Souvenir



1914

# ALPINE SOUVENIR

Being an account of the first public and officially observed appearance of the

30/35 h.p. Six-Cylinder Noiseless Napier

# INSTITUTE

WITH THE COMPLIMENTS OF

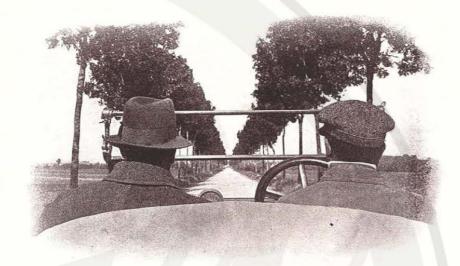
D. NAPIER & SON, LTD.,
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LONDON, W.

## **PREFACE**

WE trust that this Souvenir of the now historical "STORMING OF THE ALPS" by the 30-35 h.p. 6-cylinder Napier will be of interest, not only to those who contemplate or have completed a tour in the Alpine regions, but to all motorists and travellers.



The test was unique in being carried out under the official observation of the Royal Automobile Club, and in being the first car on record to undergo any test outside the British Isles under this strict observation.



The perpetual view from the back of the Napier!

Few, we think, understand what a manufacturer risks in consenting to such tests under official observation. It means in the first place that they have absolute faith in their car—for every drop of petrol and oil is checked—any addition of water to the radiator is noted—the gear ratios are checked and sealed—the car never leaves the supervision of the observator until night, when he retains the key of the separate lock-up garage, and every breakdown or defect is not only officially noticed but published.

In this connection we would draw the reader's attention to the copy of the official certificate on page 30, and to this extract:—

"During the stop to fill up with petrol on the last day but one of the road trial, one of the bolts holding the petrol tank was found to be loose. It was tightened in 2 minutes 8 seconds. No other work was done during the trial, and the radiator was not replenished."

This brings into prominence the exacting supervision under which the car travelled throughout, and into strong relief the car's marvellous performance of only having this loose bolt during the whole course of the stupendous test.

We think before the reader passes on to the following articles, that a summary of the outstanding features of the test will be interesting.

The total mileage covered was 2,106.5 miles.

The petrol consumption was 18'09 miles to the gallon.

Typical French road, three miles "straight" of Poplars.



The summit of the Simplon.

The radiator was not replenished throughout the trial.

The Alpine climbing was approximately 70,000 feet.

The number of acute hairpin corners and tournequet bends was about 971.

There was no breakdown or involuntary stop.

The speed attained at close of test on Brooklands Track was 62.61 miles per hour.

The car was driven by Mr. A. MacDonald, who had as passengers Mr. Willans, the official observer of the Royal Automobile Club; Mr. Murphy, assistant editor of "Motor News," and Mr. Alex. J. M. Gray, the well-known journalist. The following articles are by the two latter gentlemen, and will, we feel sure, prove interesting. The Causerist referred to in Mr. Murphy's article, is Mr. Gray, his fellow passenger.

The photographs reproduced in this Souvenir were all taken en route by Mr. Murphy, and form the most unique series ever presented.

We are naturally proud that the first car to accomplish this official test is the Napier—The Original Six-cylinder Car. It has proved itself to be an ideal hill-climber, whilst its perfect steering lock enables it to negotiate the sharpest hairpin corners with ease. To Continental tourists this latter is an important factor.

The test had to be carried out at a maximum speed of 20 miles per hour, the limit fixed by the Royal Automobile Club. The car used was a standard Napier touring model, and standard ratio gears were used throughout.

In conclusion, our hearty thanks are due, and hereby tendered, to all who took part in this famous test, which has added yet one more laurel to the fame of the Napier—The Proved Best Car.



At foot of the Austrian Alps.

# THROUGH THE ALPS AND THE DOLOMITES ON A NAPIER.

By T. W. MURPHY.

(REPRINTED FROM "THE MOTOR NEWS,")

I HOPE there is not amongst our readers any stickler for geographical accuracy who will write to point out that the Dolomites are part of the Alps. I know they are—at least I learned the fact on this trip. Geography is not one of my strong points, and least of all the geography of Central Europe. I am one of those unlearned folk that Freeston writes about in his book on the highways of the Alps—the folk who associate the Alps with Switzerland and Switzerland with the Alps, and who knows of the Alps because Napoleon crossed them. I don't mind telling you, strictly between



Entering from the Tunnel under San Moree

ourselves, that when I heard of this Napier pass storming trip to the Dolomites I had to look at an atlas to discover that they were that part of the Alps that extended into Austrian Tyrol. "Through the Alps" would, therefore suffice, but I have added the lesser, despite its inclusion in the greater, to give a picturesqueness to the title if I cannot give that quality to the letterpress.

My accuracy in describing the Dolomites as that part of the Alps in the Austrian Tyrol will be observed. For that I am indebted to our Casual Causerist, who with me formed the ballast in the back of the car. I know of no reason why the Napier people gave us each a seat and a very enjoyable holiday save that as it was desirable that it should be demonstrated that the Napier made this pass storming trip with a full load, and live weight being easier to carry than, say, a couple of bags of cement, the Causerist and I were given the privilege of occupying the back of the car and lending our weight to the undertaking. The Causerist was at pains to explain to me that although there was an Austrian Tyrol, where the mountains were called the Dolomites, and an Italian Tyrol, where they were merely the Alps, the whole of the Tyrol was really Austrian territory. Part of it was once Italian, but that was before Italy joined the Triple Alliance. That was the extent of his knowledge of the history of the country, and having left his pocket history of Europe in London, he was not able to enlighten me further.

The fact of the matter is that neither the Casual Causerist or myself is what might be described as a great European traveller. Our wanderings outside our own little island would not qualify us for fellowship of the Royal Geographical Society, easy as it is to obtain that honour. My own Continental experience consisted of a couple of motor bicvcling tours in France and a rail trip to Switzerland, and the Causerist having drawn that fact from me by adroit cross-examination. at once assumed an air of superiority by reason of the fact that he had crossed the Mont Cenis and gone through the tunnel that deprives the traveller by rail of that pleasure. He patronisingly explained to me that while it was pardonable if hardly good form, to pronounce the name of the capital of France as it is spelled, it was essential that the pass should be referred to as Mon Senee. All this I drank in with a humbleness befitting my ignorance of Continental travel, and in future when I speak of Mont Cenis with an English (or Irish) pronunciation, my friends will know I am referring



Admiring the view after descent into Italy.



Massive Snow-topped Rocks in The Dolomites.

to the thoroughbred stallion that, vide stud advertisement in The Irish Field, stands in the neighbourhood of Clonsilla.

From the time we left London until we reached Italy. the Causerist talked nothing but "Mon Senee." I listened, I hope with becoming humility, to his recital of its beauties and the terrors of its twenty-seven hairpin corners. But I don't mind confessing now that it was with two sighs of relief that I reached the Italian side of the Alps. The cause of one of the sighs will be told later on. The second was a sigh of relief that but thirty miles lay between us and Turin, and that after that I would start on level terms with the Causerist. I dismiss the matter with this observation: If on the strength of the experience of the twenty-seven hairpin corners of the Mont Cenis the Causerist built up for himself such a reputation as an Alpine traveller, goodness help the man who next shares the back seat with him now that he can add the sixty-seven hairpins (be the same more or less) of the Stelvio. Of course, he cannot trade on the whole of the sixty-seven, as the snow

robbed us of a few; but as he retails the tale in the back of another car, I expect he will keep on adding to the number we did get round until he reaches the maximum.

The raison d'etre of the Napier trip to the Alps, and its successful accomplishment of the task it was set out to do, is told in another part of this issue. It was a memorable recordmaking trip, and I would be an ungrateful clown were I not to acknowledge in the fullest and frankest manner the thanks that are due from me to the Napier Co. for the pleasure I derived from being one of the occupants of the car.

To drive the car, the Napier people sent Arthur Mac-Donald . . . . and . . . . I felt sure that if the trip in the Alps could be successfully accomplished, MacDonald was the man to do it.

Looking back over our 2,000 miles, in the calm of Lower Abbey Street, where one can review it in true perspective, I realise that the anticipation I formed had a solid foundation.



Showing the Official Observer of the Royal Automobile Club checking Petrol Supply.



The Conqueror of the Alps.

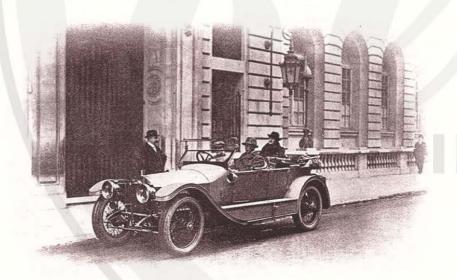
To say he handled the car like an artist is but a poor compliment to him. His driving amounted almost to genius, and while those who read of the feat will probably be most impressed by the fact that we ran 2,160 in twelve days, crossing Alpine passes of an aggregate height of about 7,000 ft. without making a single involuntary stop and without having to add a drop of water to the radiator, and on a petrol consumption of 18.5 miles to the gallon (for a six-cylinder 35 h.p. car), my memory will always be of the masterly way in which he handled the car over what must be the most difficult country in Europe, if not in the civilised part of the world.

I set out light-heartedly on the trip. If I had known the dangers it presented I would have been less happy till I had learned to know my petit MacDonald. He was more than the mere driver of the car. He was our guide, philosopher and friend. He mapped out the route, found the way, arranged matters at each of the seven frontiers we crossed, fixed us up at our stopping places, and saw that we were

ready for the road each morning. For the passengers it was a strenuous time that 2,160 miles in a fortnight; for Mac-Donald the task was Titanic.

The fourth member of the party was the observer appointed by the R.A.C. to see that everything we did on the way was noted, to measure our petrol to an oz. and see that we did nothing to the car from the time it left London until it returned. His was the easiest of jobs. It consisted merely of keeping tally of the petrol, locking up the car at night, and telling us when we were at the top of the passes. He also saw to it that we did not average more than twenty miles an hour.

To impose this restriction on a trial conducted wholly in countries where there is no speed limit struck me as absurd. One can understand that the legal limit of speed must be observed in R.A.C. trials in England, except, of course, in a Prince Henry tour; but to insist on English law being observed on the Continent is as absurd as it would be were the R.A.C. to permit of its being broken in England. It was



Leaving the Royal Automobile Club, London, 6 a.m., Sept. 13th, 1913.



Loading the Car at Newhaven.

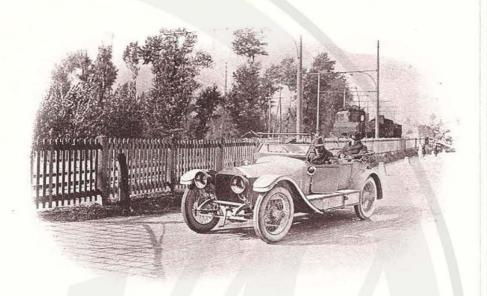
ironical that the only occasion on which we averaged more than twenty an hour was for the benefit of the observer. On the last day in France he became ill, and MacDonald ran out on the petrol in the tank, ended the trial as far as consumption was concerned, and hurried along to the coast to get a doctor. It was not that he objected to being tied down to the limit of an R.A.C. trial in England that caused us the greatest heart-burning. Personally, I would have been content to have gone through at a considerably lower average; but our route was planned on the assumption that at least twenty-five an hour would be permitted, and the slower pace compelled us to be on the road shortly after daybreak and to continue running until darkness set in. The early rising I objected to on principle. To travel after dark through a country that is new to one is sacrilege.

With a disregard for superstition we set out from London on the 13th inst., and in thirteen days we completed the trip. The combination of numbers brought us no ill-luck, for only on three occasions did we come to an involuntary stop. Each was the result of a puncture—two on the Continent and one on the way to Brooklands, where we completed the trial with the trial with a flying half-mile at 62.5 miles per hour.

There is so much that might be written of the trial that I must skip lightly over the earlier part. On a glorious autumn morning we ambled quietly through picturesque Surrey to Newhaven, where we took cross-channel steamer to Dieppe. We were amused by the anxiety of the R.A.C. guide at Newhaven and the A.A. representative at that port to assist us in the simple operation of putting the car on board, a circumstance that was due to the fact that while our triptyque papers were issued by the R.A.C., the car carried an A.A. badge. Both were excellent fellows and did not fall out as to which of them should take care of our surplus petrol until we returned. The arrangements for putting the car on board were excellent, but that is about all I can say for



Approaching the Alpine Region.



Overhead Electric Railway in Northern Italy.

the L.B. & S.C. railway, for it is little short of a swindle to charge 16s. for the use of a private cabin on top of an excessive first-class fare.

We were through the Customs at Dieppe and on the road to Paris before 5 o'clock, with a journey of 113 miles in front of us. We made it more, as missing our way on leaving Rouen in falling light, we added quite an appreciable distance to our mileage before getting on the right road. How we got on the right road is a matter I cannot tell of, for when the lamps were lit I went comfortably to sleep, and did not wake until we were at the Paris Octroi. I found this a good way of keeping level with my sleep account, and followed it throughout the trip whenever we found ourselves on the road after dark.

One regulation of the R.A.C. that I quite approved was that which compelled us to rest on Sundays. I was sorry there were not more Sundays in the fortnight. The pleasantest memories of our Sunday in Paris, which is nearly as dull

a place as Glasgow on a wet day, are our coffee and rolls in bed in the morning and dinner with a couple of MacDonald's French friends in the Tavern Royale.

We set out on Monday to get our average right, and did a two hundred miles run in a south-westerly direction to Chalons. The first portion of the journey was uninteresting. but as we got out of the flat country the district became more picturesque, and when we left Chalons in the morning we had quite a charming country to traverse to the foot of the Alps. by Bourg, Aix le Bains and Chambery. I believe I would have appreciated it muchly, but the Casual Causerist always threw the damper of the beauties of the Mont Cenis on any of my panagyrics. The Alps as seen from this portion of France are not impressive. The foot hills are in view for quite a long distance, but they are magnificent. "You'll not be disappointed when you see the Mont Cenis," my companion in the back kept on reminding me. I was disappointed, but the fault was not that of the Mont Cenis. I was in hopes that MacDonald would be content with another two hundred miles run, but to my regret he decided to push



A contented Italian Peasant, with his Oxen Cart.



The Napier at Susa on the Italian Side of Mont Cenis.

on as far as possible towards Turin, and we arrived at the foot of the pass in failing daylight. Worse still, the rain that had threatened all day came down in torrents, and up went the hood. The beauties of the Mont Cenis were shut out as completely as if we had gone through the railway tunnel. Now and then we caught a glimpse of the valley, but it was only sufficient to suggest that it was beautiful if we could see it. There was nothing to do but admire the manner in which the Napier made light of the rise of 6,834 feet, and the masterly way that MacDonald took the numerous turnings without having to once call on the lowest of his gears. There was admiration, too, for the manner in which the pass was engineered, and one took off one's hat in appreciation of the work of the little soldier to whom the modern traveller from France to Italy owes the magnificent highway that crosses the Alps. The Napier's speed was a revelation. It never dropped below twenty miles an hour, save at the hairpins, and if the R.A.C. observer had not kept his eye on the speedometer it probably would have touched thirty.

Darkness and the Italian Customs came simultaneously. The soldier who stopped us was all politeness, but the superintendent was having his dinner, and there was nothing to do but twiddle our thumbs in the car while the rain descended unmercifully. At last our papers were signed, and the lamps were lit to make the descent. I did not appreciate the prospect. I hinted to MacDonald that there were four lives in his hands, and that if we dropped into the valley he was sure to come with us. We had not travelled far when we found ourselves in a cloud which threw back the light of our lamps, and there was no alternative but to put them out. Literally we groped our way down the mountain side. Once we had a souldisturbing side-slip at one of the hairpins, and our tyres did not grip until we were within a foot of the granite pillars on the edge of the cliffs. From that point our pace dropped from ten to four miles an hour. It seemed hours before the lights of Susa twinkled out in the valley, now on our left and now on our right, as each of the twenty-seven hairpins was negotiated in turn. A full two hours were spent over a journey that in daylight would not occupy half that time;



An Alpine Garage.



Arrival in Turin.

but while one entertained a doubt as to the wisdom of making the descent under the conditions that prevailed, there was nothing but admiration for the manner in which MacDonald brought the Napier safely to Susa.

Whether one looked out from the front or the back windows of the hotel at Susa, a scene of surpassing loneliness presented itself. The Mont Cenis literally towered behind the village, its 6,000 foot top covered with snow and its lower altitudes luxuriantly coated with a forest of trees that in the morning sunshine sparkled with the rain that made our descent of the mountain on the previous night so nerveracking an affair. Our hotel was in the square of the village, and it presented such a suitable setting for a photograph of the Napier that I enlisted MacDonald's services to secure permission to get a picture from the balcony of an adjoining cafe. A few words with the daughter of the house and a couple of francs (French money passes all right in Italy when it is used for tips) seemed to make things easy; but when the

R.A.C. observer and myself presented ourselves at the door of the room that led to the balcony we found it bolted and barred against us. The lady of the house was not yet out of bed, so our historic picture could not be taken. I was forced to take the photograph from the street. The result, which appeared in last week's issue, was not unpleasing, but it was not the picture I wanted. I was proceeding to take another when an army officer politely intimated that photography was forbidden, and I was compelled to desist. Incidentally I may say that photography in the Alps has a spice of risk that it does not possess in our insular home. Almost all the passes, and all of those that cross frontiers, are strongly fortified, and consequently a man with a camera is liable to be mistaken for a spy and treated accordingly. The fact that there is no fortification within view makes no difference. As a fact, the fortifications are rarely visible from the road, but the presence of soldiers indicates their proximity in places where one would not expect to find them. If one is caught in the act, the first step the military authorities take is to



The Spot between Italy and Austria



A well-earned rest at Lake Como.

develop all the plates found on the victim. As my luggage contained a trifle of twenty-six dozen plates, I might be still in an Alpine fort while my harmless photographs were being developed were it not that I kept one eye in the finder and the other looking round the corner for any suspicious looking individuals.

Having put over 600 miles behind us in three days on the road, MacDonald promised us an easy journey for our first day in Italy. We had a mere trifle of 125 miles to Milan via Turin, and consequently did not leave Susa until 10 o'clock, a pleasing change from the customary 6 o'clock start that was our lot on the previous, and on most of the succeeding days of the trip. We were able to spend a little time after breakfast in admiration of the leisurely ways of the Italian. The method of delivering the morning mail struck us as peculiar. One postman apparently sufficed for the requirements of the village. He did not make a house to house delivery. He stood in the square and handed out the letters

and newspapers to those who asked for them—a kind of human poste restante. Nor was there any rush. The inhabitants lolled in the shade of the trees by the river or promenaded in the square, quietly strolling up to the postman when he was not busy. I liked Susa's ways. They formed a delightful contrast to our hurry.

The drive across the plain of Piedmont to Turin was altogether charming. We had a fall of about 1,000 ft. in thirty miles, and for the first half of the journey our road lay through a beautiful valley. On either side the mountains, here and there snowcapped, rose sheer, while the narrow valley in between was as flat as an Irish bogland. The road ran in an absolutely straight line, and along each side was the never-ending series of granite posts that divide the carriage way from the strips of road reserved for pedestrians and cyclists. These granite posts are as striking a feature of the highways of Austria and Italy as are the trees on the routes



Descending the Aprica Pass.



The direct road to the Aprica Pass, washed away owing to an Avalanche.

nationales of France. In the mountains they serve a useful purpose. On the plains their object is less manifest, and as the traveller in Ireland cannot fail to be impressed with the amount of money that the landowners have put into stone walls, so in Italy and Austria one is struck by the amount of capital that has been sunk in granite posts. The road invited speed—MacDonald reminded us it was on it that Nazzaro made his record of 120 miles per hour—but we were tied down to a respectable average of twenty, and dutifully observed it.

We followed the valley of the Po out of Turin, and the vileness of the road—I believe we got on the wrong side of the river—enabled us to appreciate the fine springing of the Napier. The Italian roads are nothing to write home about. Bad as they were, they did not prevent the Causerist and myself falling asleep in the back of the car, and it was only when we pulled up in the courtyard of the hotel at Vercelli that we realised that more than half of our day's journey to

Milan was covered. The hotel proprietor entertained us pleasantly with his ten years' experience of English life while he served us with lunch, and gave us excellent advice as to how we could spend a pleasant evening in Milan.

As this is not a guide book tale, nor yet a comprehensive narrative of our 2,000 miles of travel, I will spare my readers my impressions of Milan Cathedral. We got into the city in time to spend an hour in admiring one of the world's classics in marble, and the photographic opportunities it presented were not lost. The vastness of the building makes it difficult to get a picture of the cathedral from the ground level, and observing the sign of "Carl Zeiss, Jena" on the upper window of one of the houses in the square, I got permission to take a photograph from the verandah. "It's rather late," I said to the manager; "the light is poor." "Not at all," was his reply; "with your Zeiss lens you could take it at midnight."

To compensate for the poverty of our mileage from Susa to Milan, we planned an early start on Thursday, with the double object of getting our average right and spending a little time on the shores of Lake Como. As a fact, we covered less ground than on the previous day, and of Como we got but a few glimpses. The rain came down in torrents as we left Milan, and it continued as we headed northwards. We may have passed through the most charming part of Italy. but a desire to keep ourselves dry compelled us to keep up the hood during the whole of the forenoon. It was not until we reached Lecco, on the southern end of the lake, that we were able to enjoy the luxury of an open car; but although the rain ceased the sun came not, and the Italian sky of blue that theoretically should have been reflected in the waters was conspicuous by its absence. It was a dull, leaden sky and rain sodden clouds that hung over us, and consequently the beauty of Como was not for us. It was a great disappointment, and by a coincidence almost curious a similar experience awaited us later on at Lake Maggiore and at Lake Geneva.

both of which we reached so late in the afternoon that there was not a vestige of the colouring that is their great attraction. We were compelled to imagine what Como would be like with sun to give it colour. It did not require a very vivid imagination to do so, for even in the prevailing dulness the villas and villages on the lake shore looked extremely picturesque. We halted to admire the vista that one of them presented on an outiutting headland, but we were hardly out of the car when the rain came down heavier than ever, and up went the hood once more. We hurried along to Colico to lunch at a wayside inn, where MacDonald assured us we would get some typical Italian food. The menu certainly included macaronievery Italian menu does-but the other dishes were undiscoverable mysteries. We accepted MacDonald's assurance that it was a typical Italian lunch, but determined that one experience of it was sufficient. Italian hotels, outside the big towns, are extremely primitive, and while always presenting a picturesque exterior, they are not always attractive inside. The inn at Colico was our only unhappy experience in this respect.

Our afternoon programme scheduled us to do two Alpine Passes, the Aprica and the Tonale, the heights of which are, respectively, 3,875 and 6,161ft., and when we recovered from the disappointment of Lake Como we looked forward to quite an exciting wind up to the day. We did not do the two passes—darkness compelled us to stop on the top of the Aprica—but of excitement we had more than we bargained for. When we stopped at Morbegno to inquire the way out of the town—a procedure that was always necessary in Italian towns and villages—we were informed it was impossible to get to the Aprica Pass by the direct road, as the recent rains had brought down an avalanche from the mountains and completely swept away a part of the road and landed it in the river. The only alternative was to take a circuitous route by the northern side of the river, and as this was over bye-roads

of a very tricky nature, our informant strongly recommended the hiring of a guide. Accordingly, we engaged the services of a youth, who for the Italian equivalent of four shillings agreed to pilot us to a point where we could rejoin the main road. The youth earned his money, for although he had only to walk back a matter of about five miles, it took us two hours to cover the distance. It gave us an opportunity of seeing what the secondary roads of Italy are like, but it was one we would have willingly forgone.

Our guide led us out of the town by a series of lanes that were so narrow that only a driver of the skill of Mac-Donald would have avoided knocking the hub caps against the houses. The open country was no better. It was, in fact, open only in name, for when we met another vehicle, which fortunately was not often, we had to reverse to a side road or an opening into a field to allow it to pass. The surface of the road was like the bed of a river, and just as soft, and we were every minute in fear that the Napier would sink to its axles.



Where the Brain Wave struck the Casual Causerist.



The front view at same spot. The Valley is hundreds of feet below on left.

Crossing the river by a hump-backed bridge that nearly touched our under shield, we commenced the most adventurous portion of the journey. A mere track no wider than the car led to a steep hill that climbed with an appalling gradient up the face of the cliff. The river flowed—surged would be a more correct word-several hundred feet below on our right, and a low wall of rubble masonry was the only protection to prevent us from dropping into the torrent. The fear on the one hand of the car going through the road, and on the other of its hitting the wall and landing us in the river, put our hearts in our mouths. We hung over the sides to see if there was clearance, hugging the cliffs as closely as possible. A pace of more than four miles an hour was impossible, but even at this rate we became wedged. The off hind wheel dropped into the water channel at the side and the crust of the road gave way. It looked as if the trial had come to an end, for the problem of how to get the car forward or backward seemed unsolvable. There was not room on either side to pass, and to get from the front to the back of the car we had to climb over the bonnet. Labourers returning from their work in the fields proffered their help, but even if we were able with their assistance to lift the car out of the water channel, there was no room to place it on the road. A brain wave struck the Casual Causerist, and collecting stones from the overhanging cliffs we jacked up the back of the car and literally rebuilt the portion of the road into which we had sunk.

After an hour's work we succeeded in getting the car to move under its own power, but our troubles were by no means at an end. There was another mile to be covered before we joined the main road, and every yard of it was as narrow as the part in which we had been wedged. While the observer sat in the car to keep a watchful eye on the hub caps on the left-hand side of the car, the Causerist walked in front facing the car, while I walked behind. Our progress was so slow that we had ample time to read the inscriptions on the roadside shrines that stand every few yards along the road. They asked for prayers for the repose of the souls of those who had



Ascending the Aprica Pass.



Commencing the Ascent of the Tonale.

met untimely deaths by their ox-waggons falling and landing the drivers in the river. The road reminded me of the tramway line to Poulaphouca. The numerous memorials to those who had died as the result of accidents on the tramway line prompted an English friend of mine to describe it as the longest graveyard in the world. If not so long, the one we traversed was certainly more congested.

At last we rejoined the main road, and, discharging our guide, we ran along a delightful valley, and crossing the river we commenced the ascent of the Aprica Pass, a little thing in its way, a mere matter of 3,875 ft.

As it was the first of the passes we ascended in daylight, it gave us an opportunity of admiring the skill of the engineers who planned it. The road is taken up the face of the mountain, but so skilfully is it engineered that at no point is the gradient more than one in ten. To the Napier it presented no difficulty whatever, and save at the hairpins, of which there were quite a goodly number in the 15 kilometres ascent, we had to make

no call on our first gear and seldom were off the top. The pass presents a pleasing variation from the eternal granite pillared roads of the Alps, in that throughout almost its entire length there is a substantial parapet of stone with semi-circular openings to permit the snow water to pass away rapidly when a thaw sets in. This feature, which was clearly shown in the photograph reproduced in our Jottings page last week, shares with the Tonale Pass, of which the Aprica is practically a continuation, and to the road traveller who is disposed to suffer from mountain sickness it offers a not unwelcome sense of security. Incidentally, I may mention that only on the Stelvio did any of our party suffer from this distressing complaint—a kind of vertigo that is induced by looking into the valleys from the heights. On the other hand, all my fellowvoyagers suffered from temporary deafness after descending the higher passes, due to the variation in atmospheric pressure on the drums of the ears.

It was 6 o'clock when we reached the summit of the Aprica, and as darkness was already setting in we induced MacDonald to make one of the hotels on the top of the pass our resting place for the night. Some of us regretted having made the request, for the intense cold we experienced during the night caused us to wish we had descended to the relatively lower altitude of Edolo, the little town that lies a couple of thousand feet lower down and at the beginning of the ascent of the Tonale Pass.

On Friday we passed out of Italy. We had planned quite an ambitious day, winding up in the Dolomites, but the delay in getting through the Italian and Austrian Custom Houses was so great that for the first and only day of the thirteen we were on the road our mileage did not reach the century. The descent of the Aprica was no less charming than the ascent. In front of us stood the snow-capped mountain range we proposed to cross by way of the Tonale Pass, and the valley on our right was studded with picturesque

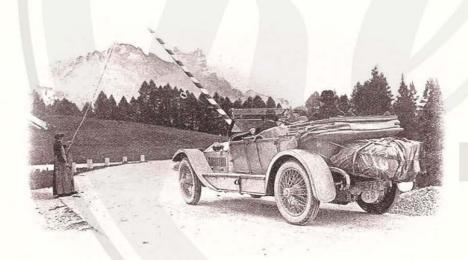
villages, each dominated by a typical specimen of ecclesiastical architecture. Edolo, the village at the foot of the pass, looked a fairy-like town from the distance, but was less impressive, as are nearly all Italian towns, when one made a closer acquaintance with it. Once through Edolo, the ascent of the Tonale commences immediately, and when we found a cart with two horses making a vain effort to restart on what appeared to be a very easy gradient near the foot of the hill, we began to realise that the Napier's ability to make light of any gradient was causing us to lose our appreciation of its power.

As the horses, with the aid of two men, could not get a move on their load, we stopped to push the cart to the side of the road, and once clear we raced up the pass at the highest permissible speed till the Italian Custom House was reached. A foolish request as to whether it was permissible to take photographs in the neighbourhood of the dogana resulted in one of my cameras being sealed, but, the Casual Causerist notwithstanding, I respected the undertaking I gave and did not use my second instrument while in Italian territory.

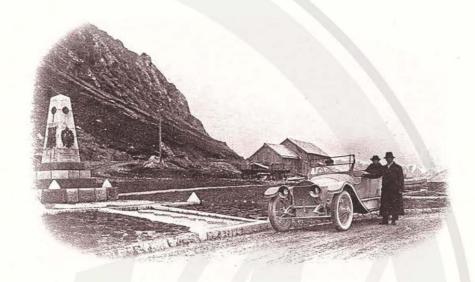
The beauty of the Tonale Pass lies in its higher altitudes. The valley through which it passes was wilder than that which we descended from the Aprica, and we voted it neither as picturesque nor as impressive as the latter. As the pass gets into the mountains it becomes narrower, and after the second of the Italian Customs Houses the beauty of the Tonale reveals itself. The vistas of the villages in the valley as the road winds round the mountain sides are magnificent, but it was only the passengers who were able to enjoy them, for a wretched road surface called for the exercise of the greatest skill on the part of MacDonald. The Austrian frontier was marked by a barrier in black and gold. The officials were not the terrible fellows the Italians had described them, but the inevitable delay in having our triptyque papers signed allowed the rain clouds that were following to overtake us,

and the descent of the pass was made in a rain storm and over a road of appalling greasiness. We lunched at the foot of the pass, and allowed the rain to temporarily get ahead of us.

Although actually in Austria, the evidences of Italian influence were seen long beyond the frontier; but the poverty-stricken appearance of the Italian landscape and the Italian peasantry gave place to prosperity as the influence of the Austrian asserted itself. Italy is on the up grade, we are told, but she has a long way to travel before she reaches the standard of comfort that is seen on every hand in the land of her northern neighbour. The Italian is not less hardworking than the Austrian, as far as the casual observation of a road traveller enables one to judge, and the industry that has enabled him to win back from nature, as it were, little patches of land in the mountains to cultivate the grape, is no less marked than is that of the proverbially industrious Switzer. He presses the services of his children and his women folk into the service of the land, but somehow he does not seem to get the



Crossing the Austrian Frontier.



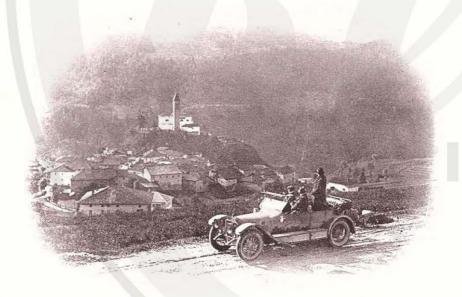
The Napier at the Summit-Surrounded by Snow-capped Peaks.

reward that falls to his northern neighbours. His dwellings are squalid and forbidding, and generally his standard of living is low.

Immediately one reaches the foot of the Tonale Pass the ascent of the Mendel commences. In fact, the Aprica, the Tonale and the Mendel Passes form a chain of passes over the mountain from Italy into Austria. The Mendel struck us as by far the grandest of the three passes. Its ascent commences in a magnificent gorge, more correctly a ravine. The view from the bridge as one swings from the south to the north side of the ravine is strikingly grand, but as we were on the ascent there was no opportunity of stopping to admire it. We had to be content with a passing glance. A couple of hairpins after crossing the river take one back in the direction of Edolo, but for the most part the pass goes up in a winding ascent. It seemed a never-ending climb. We passed into the clouds and out again. We seemed to be nearer heaven than anyone could get on earth when we topped its summit of 4,475 ft., the effect being produced by the valley being

filled with vapour. The descent to Bozen is quite a distinct type, in that the road never leaves the one mountain, and the number of hairpins was so great that we lost count of them. As we descended we got into the clouds once more and all trace of the valley was lost. Out of the clouds, a magnificent panorama lay at our feet, the respectably sized town of Bozen appearing as a mere village. Striking as is the view on the descent, it was more remarkable when we looked up from the plain at the face of the mountain we had come down. It looked like an absolutely unscaleable precipice, and one wondered at the daring of the engineer who planned a road over such a mountain. It may be noted that the Mendel Pass is one of the many new roads that the Austrian Government has built in recent years to open up the beauty of the Tyrol to the road traveller. It was completed less than thirty years ago.

Bozen we found to be no mean city. Distinctly German in its characteristics and architecture, we liked it exceedingly, and decided to make it our stopping place for the night.



Sunrise in the Tyrol-Climbing around Bozen.



An Inquisitive Cow in the Tyrol.

At the garage we had an unpleasant experience, and not for the first time we found the disadvantage of not being able to speak the vernacular. The proprietor objected to our measuring the petrol we purchased. Doubtless he suspected we were checking the quantity the tins contained, and as all of them were distinctly short he had reason for his anger. MacDonald spoke to him in French and Italian, and Gray added a few words in choice English. Ultimately we were compelled to shut ourselves in in the separate lock-up we had rented for the night, and completed our operations without his interference.

We made Bozen our starting point for our day amongst the Dolomites. It lies in the centre of an amphitheatre of hills, and probably no town in Austria has so many roads leading out of it to the mountains. Its situation is beautiful, but to judge by its stuffiness in the comparative cool of the autumn, it must be an inferno in the heat of the summer. MacDonald promised us that the circular run we were to take amongst the Dolomitic Passes would be the day of our tour, and MacDonald was right, as he always was. It was a day of pure delight. One would want all the adjectives of the dictionary to describe the grandeur and magnificence of the four mountain passes we covered in the day, and even then there would be a feeling that justice had not been done to them.

Every road leading out of Bozen is a bad one, and that by which we made our way to the foot of the San Lugano Pass was not an exception. Doubtless the wretchedness of its surface is due to the number of motor 'buses that traverse it. In Austria the motor omnibus had all but driven the horsed vehicle off the road, and on all the four passes we traversed during the day we were constantly passing and meeting huge covered vehicles carrying tourists to the hotels that are to be found on the summits of all the passes.

The Austrians are quite progressive in the matter of motor traction. Almost all their mountain passes are open to the power vehicle, and there are none of the annoying



A Magnificent Tyrolean View.



A Tyrolean Road Cleaner.

restrictions that are enforced on the Swiss passes. The result is that the Tyrol threatens to deprive Switzerland of its pride of place as the playground of Europe, from the motorists' point of view, if, indeed, it has not already done so. On the ascent of the San Lugano Pass we overtook dozens of motor omnibuses, while on the descent of the Pordoi we encountered an even greater number of private cars coming up in the opposite direction. The manner in which they steamed and boiled made us appreciate the marvellous radiation system of the Napier, which never once during the trip gave the least indication of overheating, and, as has already been recorded, did not need the addition of a single drop of water from the time we left London until we returned.

It was a most unpromising morning as we left Bozen. The rain clouds hung over the valley, and there was little to be seen on either side as we made the 3,500 ft. ascent to the top of the San Lugano. The sun made a welcome appearance when we reached the top and ran along the plateau to Prezadda at the beginning of the ascent of the Pordoi.

With the exception of Stelvio, the Pordoi Pass (7,382 ft.) was the highest of the passes we traversed, but the commencement of the ascent is at an altitude of about 3,000 feet. It is one of the most recently opened roads of the Dolomites, and as its building cost the Austrian Government a huge sum, tolls are charged both for motor cars and horse-drawn vehicles. We paid six *kroner* at Pozza, but as the road was built mainly to open the beauties of the Austrian Tyrol to the tourist we did not begrudge the charge. At first the ascent is gradual, but after reaching an altitude of 4,823 ft. at Canazei in fifteen miles the road rises to 7,382 ft. in seven and a half miles.

As one ascends the Pordoi Pass, one does not know which to admire most—the magnificence of the scenery or the art of the road engineer. There are about thirty hairpins in the last section of the road, which will give an indication of the manner in which the road is carried up the face of the mountain. The scenery surpasses all powers of description. The peaks stand out like sentinels—they are the altars of the gods, as the



A Pretty Scene on the Pordoi Pass.



One of the Tunnels of the Ampezzo Pass.

Casual Causerist put it. Even when high above the line of vegetation there is a sublimeness about the Pordoi that makes an irresistible appeal. The actual top of the pass is disappointing, but the beauty of the descent compensates, albeit it is not so picturesque as the southern side. At first the fall is gradual, but before the region of the trees is reached there are as many tourniquets to be negotiated as on the ascent.

We lunched in the valley, and at once commenced the ascent of the Falzarego Pass, which forms the third of the series of passes of the Dolomite in Strasse. Like the Pordoi, it is a new road built for through communication, and there are few villages or even houses on the route. It winds round the mountains in a truly marvellous manner, and the views of the mountain peaks one gets on the ascent to the summit (6,913 ft.) are even more impressive than on the Pordoi.

A 6,000 ft. drop through one of the most charming bits of the Dolomite country brought us to the ascent of our fourth pass of the day, the Ampezzo. In keeping with the other

passes we had traversed, it is a beautiful specimen of road engineering, and the country it passes through is not less magnificent. Indeed, if I were to make a selection of the four passes of the Dolomites that we crossed, I would take the Ampezzo; but comparisons of scenery are as useless as they are odious.

From the top of the Ampezzo we had a continuous descent for nearly seventy miles to Bozen. At Toblach we reached the most easterly point of our travels, and turned towards the setting sun. We passed through a typical Tyrolean country, the Pusterthal, and ran into Bozen through an apparently never-ending gorge, every yard of which was a picture—it was like 40 miles of the Scalp. Our road ran parallel with the river, now on one side, now on the other, and the roaring torrent at our feet was music to the cinematograph film that unfolded itself before us.

We had put nearly 180 miles behind us when we returned to Bozen, but although darkness had fallen, we decided to



Rounding a corner in The Dolomites. The Valley is a great depth below-a sheer drop.



A Tight Corner on the Stelvio Pass.

push on another 17 miles to Meran, the ancient capital of the Tyrol, for the week-end rest.

There is nothing of the antique about Meran—at least we found none in our Sunday rambles. It is quite a modern town, and apparently lives on the tourist traffic—the manager of our hotel told us that 30,000 visitors pass through the town annually. Its hotels are the last word in luxury and elegance, with charges in keeping, and we all agreed that MacDonald could not have selected a more charming spot to spend the day of rest.

At Meran we talked of nothing but the Stelvio Pass, which on the morrow was to be our route back to Italy. We reckoned, however, without the snow, for after ascending to within about 1,000 ft. of its summit, we were compelled to acknowledge defeat. It was purely a nominal defeat, for although we did not get to the top of the pass we were able to satisfy ourselves that even the highest carriage road in the world—higher than anything in the Himalayas—possessed

no terrors for the Napier. The water in our radiator was just nicely warm when we turned the car to go back to Bozen. Impressed by the magnitude of the task that lay before us, we made a 6 o'clock start from Meran. In the cold dawn of the morning the mountains on either side of the valley looked charming in their endless variety of brown tones, but soon the sun came over the tops and warmed our backs as we faced the steady rise through the valley. There was a fair at the little town of Prad, where the ascent of the Stelvio commenced, and on both sides of the town we had quite an exciting time in making our way through the numerous oxen and horses that were being driven to the town. At Prad we were 2.940 ft. above sea level, and in 25 kils, (approximately 15 miles) the road rises to 9,041 ft., an ascent of 400 ft. per mile. In point of gradient it will be seen that the crossing of the Stelvio offers no more formidable undertaking than many of the Alpine passes, but its length makes a tax on the radiation system far greater than any other pass in the Alps.



Showing a few of the Hair-pin Corners on the Stelvio.



The Napier on the Stelvio.

Further, it is on the upper reaches of the pass, when the engine has warmed itself with miles of constant pulling, that the hairpin corners commence, and when I say that, despite the great lock of the Napier we had to frequently use our reverse gear, the formidable nature of the task of climbing the pass will be appreciated.

As a feat of road engineering, the carrying of a pass over the barrier of 9,000 ft. that the Alps between Austria and Italy presents has no parallel. But apart from the feeling of satisfaction—the sense of conquest—that the crossing of the Stelvio presents, the magnificence of the scenery through which one travels makes an appeal so strong that I can well understand the tourist in the Alps turning again and again to this monumental piece of road making. That we were deprived of the pleasure of reaching the summit was the greatest and the only disappointment of the trip, and it was intensified by the knowledge that had we been a couple of days earlier we would have found the road clear of snow.

The first ten kils. of the ascent from Prad to Trafoi is through a narrow valley, the road running in a nearly straight line. The Napier never faltered on the 2,000 ft., and we had only to come down one gear from the top. At Trafoi we halted to enquire as to the state of the road, and received the unpleasant intelligence that it was useless to make an attempt to cross into Italy. "Excelsior" was our motto, and despite the tales of five metres of snow, which we were able to verify, and the news that the road was blocked by stones brought down from the mountain sides by a recent avalanche, we faced the ascent cheerfully. Hairpin after hairpin was negotiated, restarting after each reverse with a magnificent reserve of power. We passed out of the tree-growing region, and in turn got above the line of vegetation, and reached the snow.

For a couple of miles we ploughed through it, but when we found a party of road menders endeavouring to remove a two-ton obstruction that blocked the road we were compelled to halt. Fortunately, the road menders had nearly completed their task, and we were able to push on into the snow after a few minutes delay. The portion of the road that was cleared of snow was not wide enough to give a grip to both wheels of the car, and now and then, when as we came across a foundation of ice, the driving wheel turned at an alarming rate. As the snow got thicker and the track through it got narrower, it began to dawn on us that Nature was going to triumph. At a hairpin where the snow lay still deeper we came to a standstill. Not wishing to acknowledge defeat, MacDonald walked back to the road menders, and by the distribution of much coin induced them to sell the ropes with which they removed the huge stones that had blocked us lower down. Fixing them to the wheels, we got round the hairpin, but before we reached another turn the snow had conquered. MacDonald drove on until it was up to the front axle, but the task was hopeless. There was nothing to do but reverse to the tourniquet and get back to Italy by another route.



The Return from the Stelvio (over 8,000 ft. up).

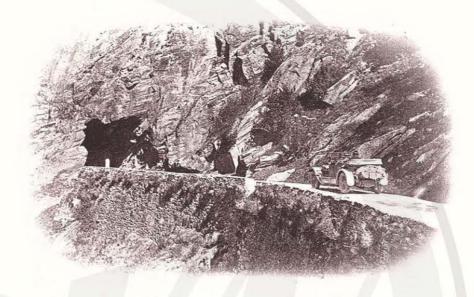
The Alps are not traversed with roads in the manner we are accustomed to find in the mountain districts of the United Kingdom, and our failure to get into Italy by way of the Stelvio compelled us to add another 100 miles to our route. We descended to Prad and retraced our steps over the forty miles we had covered from Meran and another seventeen to Bozen, every vard of which was down hill. From Bozen we made for Trento, but we did not get into Italy without a considerable amount of pass storming. Leaving Trento we had a couple of passes to ascend, and despite vile roads and an enormous amount of traffic, the Napier triumphed over them, as it did over all the scheduled passes of our route. As in entering Austria from Italy, we noted that the Italian influence extended a long way beyond the Austrian frontier. It was dark when we reached the Customs House, but on both sides the officials signed our triptyque papers with commendable promptitude. Truly the triptyque has made easy the way of the motorist who passes from one country to another!

To find accommodation for the night we had to push on another fifty miles to Brescia, making a day's mileage of 240. With darkness I followed my usual plan and fell asleep. Now and then the pave in the towns awoke me. At one village I thought I had been transported to fairyland. The place was a blaze of electric light, and the whole of the inhabitants of the village seemed to be seated in front of the numerous cafes. With an abundance of cheap power, derived from the waterfalls of the Alps, every village in northern Italy has a cheap and bountiful supply of light and power. Everyone uses it, and even the roadside shrines are electrically lit. As a result the villages look particularly picturesque after dark. The smells bring one back from fairyland.

Another day across the plains of Italy brought us to the foot of the Alps at Dornodossola, the little town near which the French aviator, Chevez, met his death after flying over the mountains from Brigue. Leaving Brescia in the morning, we traversed a relatively uninteresting country over typical Italian roads to Lecco. We had again to content ourselves



The Alternate Route.



Ascending the Simplon Pass.

with a mere glance at Lake Como, as our route lay along its western side, the mountains shutting out all view of the water. We lingered over our lunch at the town of Como, and paid for it by reaching Lake Maggiore as twilight was setting in. We got several tantalising glimpses of the lake through the trees before reaching the shore at Arona, but the drive along the water's edge was quite disappointing. There was not a vestige of the Italian blue that we anticipated; Maggiore was as dull and featureless as the Serpentine when one of London's particulars settles on it in November. After a brief stop at Strassa, we pushed along in falling darkness to the foot of the Alps.

We entered Switzerland by the Simplon Pass, and had our first and only experience of the annoying restrictions that the Swiss impose on motorists who desire to explore their mountain fastnesses. One is compelled to pay 5 francs for a permit to cross the pass, and a time limit of two and a half hours is fixed for the traversing of the 41½ kilometres from the Swiss Customs at Gondo to Brigue, the town at the foot of the

Swiss side of the pass. (It used to be fixed at four hours). The use of any kind of signal other than a horn is prohibited. and when meeting or passing vehicles or cattle the motorist has to keep to the outer edge of the road. It is only since the railway tunnel under the pass was opened in 1906 that motors have been permitted to cross the pass. Amazing as are the restrictions, they are simple when compared with those enforced on other Swiss passes, on some of which it is necessary to have the car drawn by a team of horses, presumably to ensure that the pace of a horse-drawn vehicle is not exceeded. As a fact, no attempt appears to be made on the Simplon to carry out the regulations to the letter, and one can kill time by lunching at any of the hotels on the pass or by stopping to admire the scenery. We improved the shining hour by giving the R.A.C. observer an opportunity of checking the gear ratios and sealing the back axle, a precaution that the Club took to ensure that the gear ratios were not changed between the pass storming and the speed test at Brooklands.



One of the Tunnels on the Simplon Pass.



Ascending the Simplon Pass.

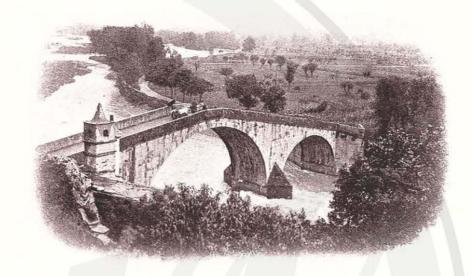
In justice to the Swiss authorities, it should be stated that the portion of the road that is under their jurisdiction is kept in far better order than the Italian portions of the pass, but the need for restrictive regulations is not apparent. The pass is one of the easiest of those we crossed in the Alps, there being a complete absence of hairpins and the road being perfectly safe for a much higher rate of speed than is permitted. The ascent commences at Domodossola, the altitude of which is 919 ft. In the twenty-five miles to the summit the road rises to 6,594 ft., but there are several parts where the gradient is much steeper than the average, albeit as a piece of road engineering it is as fine a specimen as any of the Italian or Austrian passes. In the seventeen kilometres from Domodossola to the Italian frontier there is a rise of 1,236 ft., and, despite the vileness of the road, we maintained a high rate of speed. In a few kilometres we passed the Swiss frontier, and about six miles further on reached the Customs House.

As the Swiss portion of the pass is not fortified, there are no restrictions regarding photographing, and although my fellow-voyagers were inclined to quarrel with the irksome restrictions as to speed, I made use of the opportunities the frequent stoppages presented. Out of sight of the Swiss officials, we made a long stop to admire the beauties of the gorge of Gonda, and then ran on without a stop to the hotel at the summit. The road winds round the mountains in a manner that is quite distinct from the other Alpine passes we crossed, and at every turn it presents vistas of surpassing beauty. The views from the summit impressed me more than those from the tops of any of the Alpine passes we crossed, but that may have been due to the fact that there was time to drink in the panoramic effects. Not less impressive is the descent, which we "free-wheeled" down at a respectable twelve miles an hour, reaching Brigue in time to comply with the time limit.

The Simplon was our only feat of mountain climbing in Switzerland. Our route lay along the Rhone Valley,



Killing time on the Simplon Pass owing to foolish Swiss Regulations.



Bridge near Meran.

but our enjoyment was nullified by an impenetrable haze which all but blotted out the ranges of mountains that guarded the valley on either side. We lunched at Martingy, and reached the shores of Lake Geneva as the twilight was falling. In passing through Monteaux I kept a sharp look out for a bootblack whose sign amused me on the occasion of a former visit. It read: "English spoken; American understood." Apparently, however, he had shifted his quarters. Darkness overtook us at Lousanne, and we ended the day's journey of 173 miles at Geneva.

Our last passes lay over the Alps into France by way of the Col de la Faucille and across the Jura mountains by the Col de la Savine. As both of the passes owe their origin to Napoleon, it will be understood they are fine specimens of engineering, of easy grade, wide, and of good surface. The Faucille Pass commenced within a few miles after leaving Geneva, and winds up the mountains with innumerable hairpin turnings until a height of 4,300 ft. is reached. The district is delightfully wooded, and as one looked backward through

the trees there were entrancing views of the lake. Unfortunately, the haze that troubled us on the previous day in crossing through the Rhone Valley was in evidence on the higher parts of the pass, the panorama was not enjoyed to the full. We descended to an altitude of 2,200 ft. to the gorge of Morez, and then climbed into the Jura mountains, topping the Col de la Savine (3,248 ft.) without breaking our record of having climbed every one of our scheduled passes without having to use our lowest gear. Quite a charming run through the Savoy country brought us to Dijon, and running on after dark, we made Troyes with a run of 220 miles for the day.

Another double century run landed us at the coast at Dieppe, and in the morning we awoke to find the chalk cliffs of England in sight. There is one impression of the French roads I would like to record as a result of 600 miles in that delightful country. They have not suffered from motor traffic to anything like the extent that one reads in the English Press, and every effort appears to be made to maintain them at the high standard of excellency that has made the highways



Leaving The Dolomites.



The finish at Brooklands.

of France famous throughout the world. It may have been that we were singularly fortunate in the route we covered, but I think the roads we traversed may be taken as fairly typical of those of France of to-day. They have suffered, it is true, as English roads have suffered, by having to carry a volume of traffic of a kind they were never intended to bear, and here and there one comes across pot-holed sections of unspeakable badness. As is also the case in England, a coarser standard of maintenance is aimed at, and one no longer sees the road mender on his knees hammering in a loose stone. No attempt. however, appears to have been made to grapple with the dust nuisance, and in our two thousand miles on the Continent we did not come across as many miles of tarred road as we found between Newhaven and Brooklands. We came up by the Brighton road, almost every yard of which the Napier brought its trial to a successful conclusion, by attaining in its first attempt a speed of 62.5 miles per hour, demonstrating, as was intended, that the standard gear ratios were used on its memorable trial in the Alps and Dolomites.

# 30/35 H.P. SIX-CYLINDER NOISELESS NAPIER.

1914 MODEL.

#### ROYAL AUTOMOBILE CLUB.

### EXTRACTS FROM CERTIFICATE OF PERFORMANCE IN A --

### TEST OF A 29.5 H.P. (R.A.C. RATING) NAPIER CAR

(Under the Open Competition Rules of the R.A.C.), September 14th to 27th, 1913.

This is to Certify that a 30/35 h.p. (29.5 R.A.C. Rating) Napier Car was entered for trial by Messrs. Napier Motors, Ltd., of 14, New Burlington Street, London, W.

#### PARTICULARS OF CAR.

Bore and Stroke of

Engine ..  $3\frac{1}{2}$  in. by 5 in.

Number of Cylinders 6

Weight of Car ... 4,186 lb. (37½ cwt. approx.)

Weight of Load (Road

trial) .. .. 902 lb.

Total running weight (Road trial) ...

. 5,088 lb. (45½ cwt. approx.)

Type of Body .. 5-seated touring.

Wind resistance area

of body . . . 14.2 sq. ft.

The following route was traversed:—London, Newhaven, Dieppe, Rouen, Paris, Sens, Chalon, Bourg, Seyssel, Chambéry, Mont Cenis, Turin, Milan, Lecco, Sondrio, Aprica Pass, Tonale Pass, Mendel Pass, Bozen, S. Lugano Pass, Pordoi Pass, Falzarego Pass, Ampezzo, Bruneck, Brixen, Bozen, Stelvio (impassable), Bozen, Trent, Vela, Brescia, Bergamo, Lecco, Como, Gallarate, Domodossola, Simplon Pass, Brieg,

Vevey, Lausanne, Geneva, Morez, Dijon, Troyes, Nogent, Meaux, Beauvais, Gournay, Dieppe.

The total distance travelled was 2,106.5 miles, which distance was covered at an average speed of 20.3 miles per hour. The fuel consumption was at the rate of **18.09 miles** per gallon, or 41.08 ton miles per gallon.

The weather was good to fair, with much rain on two days. The Stelvio Pass was impassable owing to an avalanche having carried away a portion of the road.

During a stop to fill up with petrol on the last day but one of the road trial, one of the bolts holding the petrol tank was found to be loose. It was tightened in 2 min. 8 sec. No other work was done during the trial, and the radiator was not replenished.

After the road trial the car was driven to Brooklands track, where it was timed over the flying half-mile, the speed attained being 62.61 miles per hour.

The running weight of the car during the speed test was 5,005 lb.

(Signed) ARTHUR STANLEY, Chairman. (Signed) W. WATSON, Vice-Chairman of Technical Committee.

(Signed) J. W. ORDE, Secretary.
Date, October 3rd, 1913.
Pall Mall, London, S.W.

# "STORMING THE ALPS ON A SIX-CYLINDER NAPIER."

A MOST REMARKABLE TRIAL OF A NEW MODEL CARRIED OUT UNDER ——OFFICIAL OBSERVATION OF THE ROYAL AUTOMOBILE CLUB.

The Napier has added another notable page to the history of automobilism. Not content with holding the largest number of officially observed Royal Automobile Club tests during which it has, over the last few years, robbed every notable hill and difficult route in the United Kingdom of its terrors, and reduced it to simple proportions for the owners of Napier cars, it has recently gone abroad to put the latest production of the Napier Factory (a 30/35 h.p. 6-cylinder Napier Touring Car) through a most exacting and strenuous mountain climbing test, and in a single trip covering less than a fortnight has climbed every Pass of note in the Alps and the Dolomites—a matter of over 2,100 miles, and the enormous total of over 66,000 feet of mountain climbing.

There is more in this last officially observed reliability trial than meets the eye. There may be other cars that could cover the same ground in the same period; but the number of cars that could climb at 20 miles per hour around the everlasting tourniquets of Alpine passes without falling more than one gear from "top"; climb without stop or a single falter; without boiling or the remotest suggestion of a boil; cover the whole distance out and home without an involuntary engine stop and without adding any water throughout the test; average 18 miles to the gallon with four up and baggage; and at the close attain a track speed of  $62\frac{1}{2}$  miles per hour, still fully loaded;—the cars that can equal this performance are still to be found, probably still to be made.

So far only the Napier has achieved these feats under official observation, and mark you, the official observation of the English Royal Automobile Club. In that, it has established a record not likely to be broken. It was a test of heroic proportions and wholesale Pass conquest. We

venture to think it will be agreed that it constitutes not only a novel essay in reliability, but a valuable demonstration of the efficiency and economy of the new 1914 model 30/35 h.p. 6-cylinder Napier. The achievement is the more remarkable in that for practically the whole of the first week the most adverse conditions prevailed—heavy rains and blusterous head winds militating strongly against economic success.

Of the passes included in the test the following are the more important:—Mont Cenis (6,834 feet); The Aprica (3,875 feet); The Tonale (6,181 feet); The Mendel (4,475 feet); San Lugano (3,599 feet); The Pordoi (7,382 feet); The Falzarego (6,913 feet); The Ampezzo (5,065 feet); The Stelvio (9,041 feet); The Simplon (6,594 feet); and the La Faucille (4,331 feet). There were a large number of minor hills of from 1,600 feet downwards, hills not lightly to be regarded, being steep of ascent and of very rough surface, but insignificant in comparison with the grandeur and difficulty of the more important peaks named.

Of these the Stelvio alone, the highest carriage road in the world and the most wonderful, resisted capture, having called five metres of snow to its aid and completely blocked the pass above 8,000 feet, up to that point the Napier climbed with the same ease that had been so notable a feature of its running on other passes.

As indicating that the car was never spared nor "nursed," it may be mentioned that the day's run over roads, sometimes entirely atrocious and inches thick with mud, touched or exceeded 200 miles on several occasions. Such a day was the one that included the Stelvio, while another day the San Lugano, the Pordoi, the Falzarego, and the Ampezzo passes were scaled, the total mileage again touching 200. In these

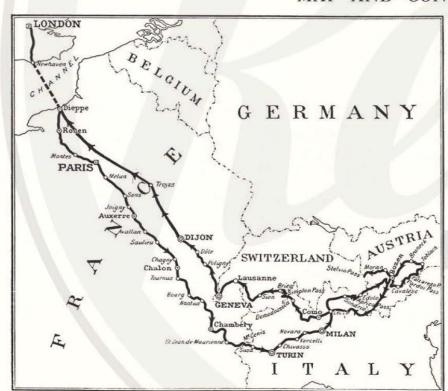
circumstances the consumption of 18 m.p.g. for a 30/35 h.p. 6-cylinder is particularly gratifying and establishes the new Napier in the forefront of cars of economy.

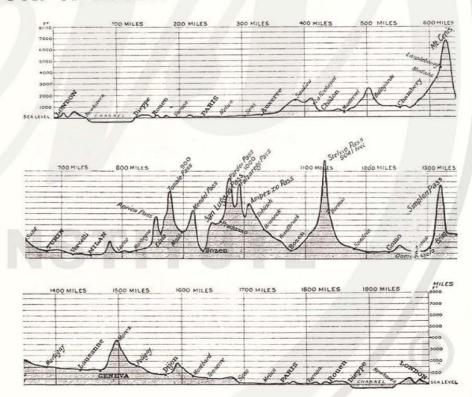
On the face of it there was no need for a Napier car to make any such demonstration. The Napier records under official observation are without parallel. In every department where motoring service could be proven, it has made good its case under observation. The thoroughness of the firm is notorious, and has been since it first entered the arena of automobilism. They are the pioneers and the premier manufacturers of 6-cylinders—the only British car to win the International Gordon-Bennett Trophy for Great Britain. The performances of the Napier have been appreciated by the motorists of the world, and it has established itself by right among the few foremost cars of the world.

This first essay of the new 30/35 h.p. 6-cylinder Napier cannot but inspire conviction that it is a vehicle of wonderful power combined with proved economy even under the most trying conditions. When it is remembered that the car always carried four passengers and much heavy luggage (a total of 5,088 lbs.), that it was never cleaned externally, that it was not a special car, that it was under official observation throughout, and sealed up at night by the R.A.C. observer, that the petrol was most carefully openly measured, that the conditions were mainly dead against economy, and when too, it is remembered that despite the ease with which it climbed mountains, it yet was geared high enough to allow a speed of 62½ miles an hour on the track with touring body fully loaded, I venture to think it will be agreed that the Napier has once again made record and history.

A. J. M. GRAY.

#### MAP AND CONTOUR OF ROUTE.





# Interesting Extracts from correspondence in the "Autocar" relative to this trial.

#### THE NAPIER ALPINE TRIAL.

[20247.]—In all the letters (both praising and blaming this trial) one point seems to have been missed, namely, if this test had taken place in the hot weather would the radiator have gone through without replenishment?

THERMO.

"AUTOCAR," Nov. 22nd, 1913.

#### ALPINE PASSES AND RADIATION.

[20273.]—I think I may reasonably volunteer an answer to your correspondent "Thermo," who asks whether, if the R.A.C. Alpine trial had taken place in the hot weather, the Napier radiator would have gone through without replenishment.

No driver with a defective radiator could hope to escape the consequences by an attempt at dodging the weather. The air is rarefied at Alpine altitudes, and the effects of the sun are quickly felt. A moderate amount of rain would make comparatively little difference if the radiator were unequal to general touring work, but if definitely cold weather were waited for the rain would be converted into snow on the higher stages, and the road would become impassable. Only by sheer luck could an imperfectly cooled car hit upon a day which enabled it to get over a particular pass as regards coolness, but did not at the same time cause the road to be blocked. The next pass encountered, however, if of formidable height, would meanwhile have been blocked, and it would be entirely absurd to choose an early or late time of year for a trial out of regard to a defective cooling equipment. So far as the Napier is concerned, it has been stated that it went through the whole trial, not merely over the passes, without replenishment of the radiator, and in that case the margin for error was undoubtedly wide enough to be unaffected by the weather.

It is only too clear that the difference between what can be accomplished in the way of radiation and what is sometimes available is very marked indeed. Personally, I should be quite content if a British-built car were equal to the ascent of a stiff pass, without boiling, but required a little water at the top, although there are standard English cars which will cross not one, but many passus without replenishment. Some makers, however, so specifically address themselves to British conditions alone, and regard a continental journey as a thing abnormal, that their cars will not ascend any mountain road without trouble. Within a single week this summer I met two friends just returned from continental travels, who reported widely opposite experiences, on standard English cars. One stated that his car boiled badly on the Mont Cenis, one of the easiest of passes to cross, while the other had no trouble throughout a lengthy tour, though he had the hardihood to tackle the Col de la Forclaz, one of the most difficult roads in the Alps. His car had in no sense been designed for Alpine work, but was identical with hundreds of its fellows which may never have left England.

Why need matters be cut so fine for English work? I now see, by the way, that a tourist has complained of his silencer bursting as the result of using the compression of his engine down a pass, and his car was of the same make as the one which boiled on the Mont Cenis. If some British manufacturers wish to build for home use only no one will blame them provided they will announce their policy; but when other British cars will do all that is required of them, without special preparation, a man feels badly left when he buys a new mount and finds it unequal to what his previous car accomplished. People do tour a little nowadays, to put it mildly; e.g., one thousand cars have crossed the Simplon Pass this summer, and the bulk of them, I make bold to say, were owned by British or American travellers.

CHAS. L. FREESTON.
"AUTOCAR," Nov. 29th, 1913.

[20312.]—I was very pleased to see Mr. Chas. Freeston, F.R.G.S. [letter 20273], had replied to your correspondent "Thermo" on the matter of the cooling efficiency of the Napier throughout this test, and I took the opportunity of writing and thanking him for the trouble he had taken in communicating with you. Mr. Freeston has since kindly sent me a copy of his very interesting book, "The High Roads of the Alps," and which I can certainly recommend to any of your readers who are anticipating a motor trip over the Alps. I am quite sure if those who are so interested would read chapter five in this book on "The Equipment of the Car," they will more readily appreciate the many good points embodied in the six-cylinder 30-35 h.p. Napier, and he particularly emphasises, amongst others, such points as:—

1. The necessity for a good steering lock in order to negotiate the many hairpin corners which are met on the passes, and to give an instance of this, the Napier on its Alpine Royal Automobile Club test took in the Pordoi Pass, on which Mr. Freeston mentions there are no less than sixty hairpin corners.

2. Efficient water cooling, on account of the long steep ascents which have to be negotiated.

The necessity of having thoroughly efficient brakes in order to negotiate the long steep descents.

Altogether, Mr. Freeston's book is a particularly interesting one, and will prove of particular interest to those who contemplate touring in the Alps.

H. T. VANE. "AUTOCAR," Dec. 13th, 1913.

To my mind, such reliability tests on the road with an ordinary touring car are of much more interest to the man who is thinking of buying a car than all the 100 m.p.h. performances on the track with a specially-built racing car.

Extract from letter [20275].—"AUTOCAR," Nov. 29th, 1913.



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