All these roads are artificial, cut into the sides of valleys to lift them over passes which in wihter are snowbound and for a large part of the year are subjected to heavy rains. They are magnificent feats of engineering, recalling the fact that a genius for road building is one of the few undoubted inheritances of the Italians from the Romans, but for that very reason are peculiarly susceptible to demolition. The latter is a craft at which the Germans, after their experience in this war, can probably claim to be world masters; Kesselring himself had ordered his troops to carry out demolitions "with sadistic imaginativeness" and they had always proved themselves equal to this demand. The greater number of roads are in the western half of the area, between Florence. and the Tyrrhenian Sea, and the shortest routes lead due north from Florence. In the eastern half there are only the two roads which lead to Forli and Cesena and both these run northeast instead of due north. Lateral communication is infinitely better on the northern side of the mountains than on the southern. On the latter movement from east to west is limited to a few poor roads across the mountains but on the Germans' side the Via Emilia, Route 9, runs along the whole length of the position. It is a broad, straight road on the flat, with numerous short roads leading off it into the mountains, for the crest line is nearer the southern than the northern edge and the secondary road system on the latter is therefore much more developed. This is an enormous advantage to the defender, for in the defence of a line it is vital to be able to move forces rapidly from one sector to another where the threat is greatest.

The original German plan for Italy, as Hitler told Mussolini at the Feltre conference in July, 1943, was to hold nothing south of the line of the Northern Apennines so that the preliminary reconnaissances for the "Gothic" line were probably carried out about that time. Work appears to have begun in September, 1943. The first work was done at the two ends, in the coastal plain south of La Spezia and behind the Foglia river on the Adriatic, and in the centre, where elaborate defences were constructed on the Futa Pass. Italian forced labour and a Slovak Technical Brigade were used; but as the winter of 1943 progressed most of the labour force was diverted to work on the "Gustav", "Hitler" and "Caesar" lines, and it was not until the fall of Rome that priority was restored to the Gothic "line and the work was pushed ahead at the highest pressure. It was principally to gain more time to allow for the "Gothic" line to be completed that Kesselring fought the battles of Lake Trasimene and Arezzo. At one time it was expected that it would be ready by 30th June but in fact our attack on the Adriatic on 25th August found many of the defences on the Foglia still unfinished while in some of the more inaccessible mountain sectors they were only in the early stages of development.

The total length of the line of defences was about two hundred miles. In the west the approaches to La Spezia and the valley of the Magra were barred by a system of anti-tank defences in depth with two artificial obstacles seven miles apart; this was the only example of defence in depth in the system. From the region of Carrara the line swung south-east

through the Apuan Mountains to a strongpoint at Borgo a Mozzano, astride the two routes north from Lucca to Modena. This was the first of a series of strongpoints blocking all the routes north; they were connected with each other by a continuous line of positions running through the mountains, with subsidiary strongpoints at places of particular importance. The main blocking positions were at Porretta, north of Pistoia, the Vernio Pass north of Prato, and the Futa and Il Giogo Passes north of Florence. From here the line ran south-east, following the crest of the Alpe di San Benedetto, with strongpoints at the Casaglia and San Godenzo Passes on the Faenza and Forli roads, until it reached the Alpe di Serra where strongpoints at Serravalle and Valsavignone blocked the two roads to Cesena from the upper Arno and upper Tiber valleys. From here it turned roughly east again, following the course of the River Foglia, until it reached the sea at Pesaro. For the last thirteen miles, where the foothills are lower, the line was particularly strong, and the defences included anti-tank ditches, extensive minefields, bunkers and various types of built-in tank turrets. Attention had also been paid to the seaward flanks of the line to guard against an amphibious outflanking. This was scarcely a danger at the western end, but the defences of La Spezia were strengthened. On the Adriatic a line of cliffs runs from Pesaro to Cattolica and this was supplemented by defences extending as far north as Ravenna.

Early Plans for the Attack on the "Gothic"
Line.

After the great victories of the spring offensive, with Rome in our hands and the Germans withdrawing rapidly through Latium and Tuscany, pursued with the utmost vigour by my two Armies, it seemed likely that the Northern Apennines would prove merely an incident in our pursuit, which would carry on almost unchecked across them into the plains of the Po valley. Even if this proved too optimistic a hope it was reasonable to expect that we should quickly be able to bring such forces to bear in a frontal attack as would ensure the piercing of the mountain barrier; the success of the French Corps in the Aurunci mountains had shown the way and proved that the Germans could no longer place such confidence for their defence as previously in the difficulties of the Italian terrain. But before the end of June these hopes were dashed by the withdrawal of seven divisions from our side and the arrival of eight reinforcing divisions for Kesselring. Encouraged by this the German troops, who in the early days of June were speaking gloomily of the Brenner as their next stop, were able to rally and convert our pursuit into a hard-fought advance. The withdrawal of forces for the operations in Southern France represented not merely a quantitative loss to my Armies of over twenty-five per cent. but also a qualitative loss, for the French Corps had the greatest experience and training in mountain warfare of all the troops under my command and included my only regular mountain division.

This considerable reduction in my strength did not at first alter my plans for dealing with the "Gothic" line, which were to attack it in the centre on a front from Dicomano to Pistoia and debouch into the Po plains at or near Bologna. From the topographical point of view