

II—A TRIANGLE OF SECURITY

INDUSTRY AND ARMS

In this concluding article the Belgian military expert discusses the more static defences of Poland, including her material resources and industries.

By Robert Leurquin

Poland is an island without natural defences set in a sea of nations. For 2,000 kilometres the German frontier forms the arc of a circle which holds Poland in a pincer-like grip. This situation would make the task of the Polish general staff none the easier, but if war should come there would be no preconceived ideas about the intentions of the enemy, but a firm resolve not to be pinned down or hypnotized in the field.

Much might be expected of the Polish sense of manoeuvre. It must not be overlooked that Poland is a formidable battlefield for modern armies dependent on roads. Whereas armies invading Belgium or France would find passable roads every three kilometres or so, the average is 10 times less in Poland and even then entirely theoretical. The Polish-German frontier has, all in all, five roads suitable for motor transport, with concrete bridges capable of carrying heavy traffic. Everywhere else the roads cross numerous winding rivers over weak wooden bridges equal only to light weights. These factors would count against the invader to the advantage of the defender. Nevertheless, the defence would



labour under a heavy burden: the absolute necessity of covering the sources of supply situated near the Carpathians in a triangle known as the "Triangle of Security." The Polish army would be forced to avoid being cut off from this base, because even if it were supplied with material of good quality, it has not yet had the time or the means for building up sufficient reserves to be self-supporting for long. And in war time wastage, loss of material, and expenditure of munitions are enormous. The Polish general staff has therefore to fix its attention constantly on the sources of supply.

These sources are concentrated to the south, in Upper Silesia, and in the triangle of which originally the Carpathians formed the base and the town of Ostrowiec, the apex. This triangle was established some years ago to protect the Polish metal industries from the German menace on Upper Silesia, where the industry

menace on Upper Silesia, where the industry was concentrated. Polish Silesia has been covered by a shield which makes any surprise impossible. There is an unbroken chain of armoured fortifications, built in two storeys, similar to the Belgian fortifications. The works are permanently occupied, each by 25 men, and are capable by their fire of preventing an enemy from using a network of roads which is as dense in this region as in western countries. Efficacious as they are, these defences do not offer adequate protection in every contingency. Therefore the Poles removed their Vulcan's forges farther south, to a triangular region of which the Carpathians still form the base, though the apex has been brought back since last year to the mouth of the San, 200 kilometres from the German frontier, and more than 300 kilometres from the Soviet frontier. Extended in this manner, the triangle of security has become really strategic, covering about one-seventh of the country, a veritable central redoubt in defence.

The new region so defined has been entitled "Central District of Sandomierz," more commonly known in Poland by the initials Z.O.P. The intention of the Warsaw Government is to transfer to it not only their war industry, which started production in the region as far back as 1925, but the whole industrial activity of the country, including the metal factories of Silesia. Thanks to natural gas resources the new region can do without fresh supplies of Silesian coal, the delivery of which in time of war must be problematical. At the same time a less expensive source of energy has been found. It produces 615 cubic metres of gas a minute, and is now connected with the industrial centres by two buried pipelines, one 220 kilometres, the other 140 kilometres long. A visit to the region B. and C. gave an opportunity to observe the intense activity which reigns in the factories. The ground and the forests are being disembowelled by pick and axe, and the skeletons of industrial plant and manufacturing towns are rising everywhere. Some of the factories are already working full time, such as the thermic oil furnaces that turn out guns 14 metres long. Foreign observers say that the anti-aircraft guns manufactured under licence are of remarkably good finish and quality. Everywhere the factory equipment is of up-to-date pattern. At Stalowa-Wola a city of steel is rising from the ground; the tall furnaces and metal workshops will be in full activity in the second half of this year, and some sections are already working. This industrial organization derives its energies from a central station with a power of 40,000 kilowatts. Owing to deposits of iron found in the centre of Jaslo it is hoped to create a paying industry on the basis of a cost of production of 22 zlotys a ton of steel.

FINANCE AND FOREMEN

The effort thus undertaken by Poland is gigantic if one takes account of the country's very limited financial possibilities, which must handicap development. To increase its effect and allow the country to pass from a production on the laboratory scale to mass production a larger and more stable cadre of foremen will be required and, above all, important and profitable contracts, which the home market cannot provide. On the strictly military plane one must also know how this centre will replenish stocks of raw materials in time of war. In the present state of affairs, in order to maintain its activity for six months, the triangle should have at disposal stocks of raw materials to the value of half a milliard francs. This is a financial effort beyond the forces of the country, stretched to the utmost as they are. To-day, by reason of the occupation of Bohemia and of the German protectorate of Slovakia, the triangle has lost its geographical shape, and with that its base. Moreover, the fortifications which cover Upper