



Bilderberg Meeting 1970, bæklingar, 2. hluti

Bjarni Benediktsson – Stjórn­mál – Bilderberg Meeting, Bad Ragaz 17. – 19. apríl 1970 – Bæklingar –
Kort o.fl.

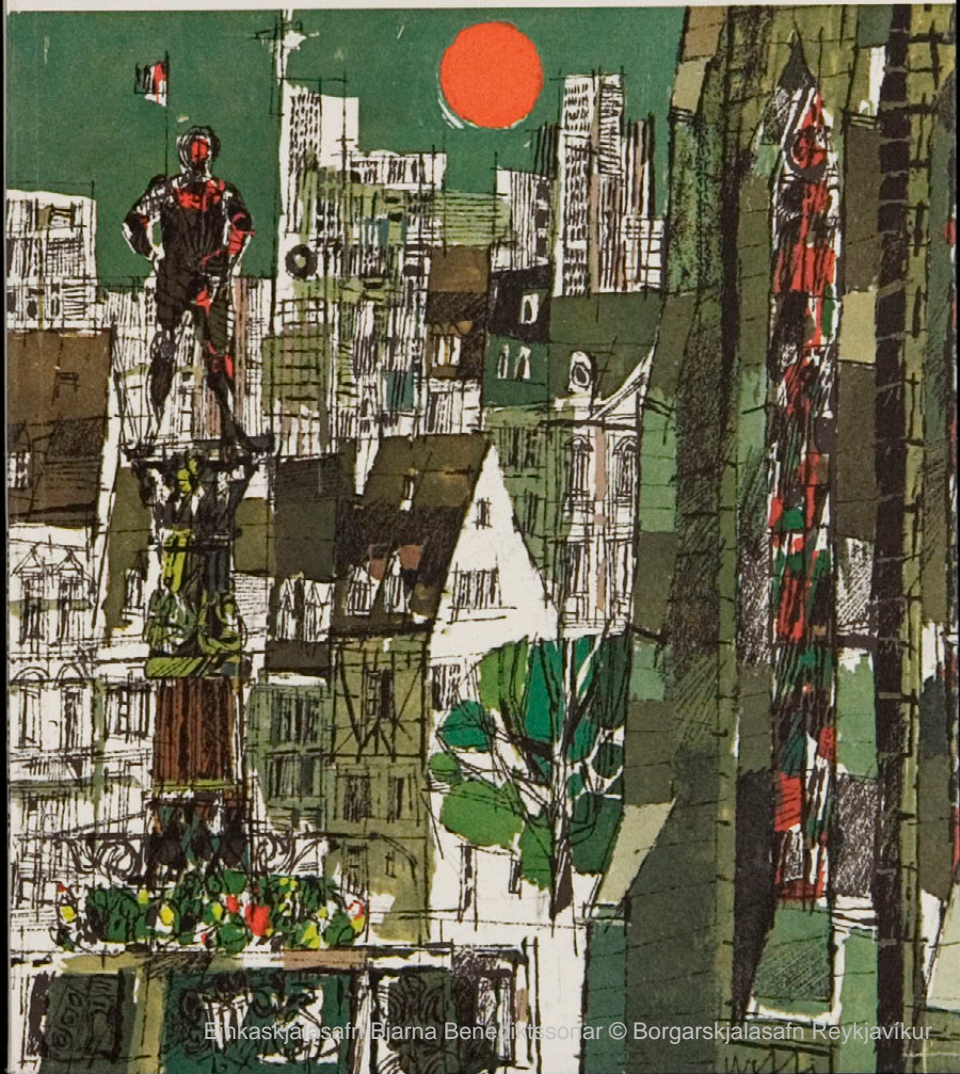
Tekið af vef Borgarskjalasafnsins

bjarnibenediktsson.is

Einkaskjalasafn nr. 360
Stjórn­málamaðurinn
Askja 2-44, Örk 5

©Borgarskjalasafn Reykjavíkur

All about Switzerland



Bankaskjalasafn Bjarna Benediktssonar © Borgarskjalasafn Reykjavíkur

All about Switzerland

A short survey

by Dr Hans Bauer
Published by the Swiss National Tourist Office

Printed in Switzerland 1968

Foreword

When the five hundred and fifty thousandth copy of a Swiss publication available only abroad and on special request comes off the press, this fact alone is sufficiently eloquent to serve as a foreword to a new edition. More than half a million readers in distant countries and speaking at least ten different languages have, over the years, asked to receive "All about Switzerland" although no special effort has been made to promote sales and although, as they were perfectly well aware, it is a purely factual account of Swiss institutions and affairs and not humorous or critical in content. Judging by the number of unsatisfied requests—the booklet has been out of print for several months—some six hundred thousand readers will soon have had the opportunity of reading "All about Switzerland"! Although figures alone never tell the full story, it is fair to say that a readership of this size is evidence of something more than successful publishing. It might be regarded as an endorsement of the objects the booklet was intended to serve.

It would be appropriate, therefore, if this Foreword contained a word or two about the purposes which the Swiss National Tourist Office and Siegfried Bittel, its Director at the time, envisaged when they published the first edition in 1946. Twenty-two years have passed since then and numerous revised editions and translations have appeared, but the original aim of the publishers has remained unchanged. Even so, twenty-two years is a long time! A glance back to the first year of publication may be of interest to the reader, and the publishers may also find it salutary to refresh their memories of those early days.

The War had been over for a year when "All about Switzerland" first came out in 1946. Throughout Switzerland there was a strongly felt desire to emerge from wartime isolation, to pick up old threads and to make the voice of Switzerland heard once again in the comity of nations beyond the newly opened frontiers. Such a desire was thoroughly understandable. For six years of war the Swiss population had been closed in, sealed off, and thrown back upon their own military, economic and spiritual resources; unwavering in their faith in the first axiom of Swiss policy—the defence of independence and neutrality—they were determined to commit their well-equipped army only in the event of an attack from outside, to submit to the arbitration of arms solely in their own defence. But this isolation, which followed from faithful adherence to an obligation confirmed by international law, was not to be construed as an unwillingness to face the great spiritual problems besetting the world. The time had therefore come for Switzerland to remind others that, throughout their history and by tradition and

national character, the Swiss had always felt the closest ties with the rest of the world and been very much alive to its influences. It was in their country that the International Red Cross had been founded a century before by a Swiss. And it was there, too, that such organizations were formed as the International Postal Union, the International Telephone Union, the International Railway Office and many other world bodies connected with the League of Nations in Geneva and later with the United Nations Organization. It was also desired to remind other peoples that the Swiss themselves had a predilection for travel, for making contacts with other lands and peoples and for peaceful competition in trade and things of the mind. Except Austria, no other country in the world earns more per head of population from the tourist trade than Switzerland; but since 1946 no other country in the world has spent more per head on foreign travel. Switzerland both gives and receives.

Thus there was a great deal to say after all those years of isolation. But what form should the message take to these other war-ravaged countries? Was not the best simply a straightforward factual account presented without commentary in the manner subsequently attempted in "All about Switzerland"? This urge on the part of the Swiss to tell the world about themselves was matched by a need for detailed information about Switzerland which had been felt abroad as early as 1946. The call for facts and figures about our country came from every continent. Such inquiries were not concerned merely with the advantages of a holiday paradise still intact in the heart of Europe; people in other countries were just as interested in our Swiss politics, our trade and industry, our cultural life, our schools, our country and our people. Time and again questions were asked about those factors that had permitted a people of different linguistic and cultural affiliations to form a single nation and—contrary to all textbook preconceptions of nationhood in terms of a community of language and culture—enabled them to achieve on a small scale that European integration to which so many aspired. Although our booklet could not answer such questions exhaustively, it nevertheless contained the essential information about the way we are governed. Time and again we are asked how it is that a small alpine republic, although threatened and ringed round by power-hungry states, has been vouchsafed victory in the greatest battle of all: the battle for peace. It would be presumptuous of the Swiss to attempt an answer, conscious as they are of the guiding and saving hand of Providence in their history.

Thus in spite, or perhaps because, of its factual approach, this booklet has become a Swiss best-seller. And at the end of 1962, when the world-wide clash between East and West is approach-

ing a crisis and European integration is a matter for serious debate, it seems to us that there is good reason for its continued existence.

For this edition (550 to 590 thousand), the author, *Dr Hans Bauer* of Basle, has maintained the same arrangement in sections, carefully revised the text and brought the figures up to date. He has kept closely to the policy laid down 22 years ago and made it his business to set out the facts and quote chapter and verse. As an expert, he is thoroughly conversant with the principles of our federalist democracy and the rules by which it functions; he has given copious figures recording the achievements of Swiss trade and industry; and he has provided a succinct account of our cultural life. We should like to thank him here for his excellent work. Little space has been devoted to the scenic and climatic features which might be expected to figure prominently in a booklet from the publicity office of a holiday country; in their stead appear a selection of photographs, and more particularly, ten gaily coloured prints by *Hugo Wetli* of Halen. These communicate the typical atmosphere of some regions of our country and serve at the same time as a token of the high standards attained today in our graphic arts.

This booklet deliberately refrains from pressing the traditional claims of Switzerland as a holiday country. Once bent upon a visit to Switzerland, let our guests make the acquaintance not only of our rich and varied scenery but also of the Swiss people in all their diversity, of our virtues and our foibles, our quirks and our quiddities. This is the wish that accompanies our booklet on its mission abroad.

On very rare occasions some commendatory epithet has slipped from the author's pen when describing our Swiss institutions. The reader must not interpret such verbal flourishes as advertising but as an unconscious expression of the close links binding every Swiss to his native soil. The sober Swiss is not given to grandiloquent declarations of his affection for his country. This is something he carries close to his heart. And for this reason one characteristic of the Swiss—his passionate love of his country and freedom—finds no expression in the 60 pages of factual reporting that follow. Some emotions lie too deep for words.

Dr Werner Kämpfen
Director of the Swiss National
Tourist Office

Zurich, January 1968

All about Switzerland

There is no country in the world quite like Switzerland. Small as it is, it has succeeded in welding twenty-two states, representing a diversity of European languages and cultures, into one harmonious whole. Though poor in natural resources, its people have, by their own industry, raised the country to a level of prosperity difficult to achieve where there are neither raw materials nor a sea coast to facilitate trade. The League formed by a small number of independent peoples in the 13th century founded a tradition of national independence which has lasted unbroken through all constitutional changes. The democratic, federal structure of the country has not been the only determining factor in uniting different languages, races, religions and cultures. By adopting, out of profound conviction, the principle of permanent neutrality and renouncing any kind of power politics or recourse to force except in self-defence, Switzerland has become in ever greater measure a stabilising element in international affairs and a factor of peace in the heart of Europe. The Swiss, of course, share a number of characteristics with other peoples; what is unique is the combination of all in one national whole. That is what outside observers meant when they spoke of "the miracle of Switzerland", when they found accomplished here what seemed impossible elsewhere, when they heard the love of one country expressed in many tongues and saw the brotherhood within the Confederation extended to people of like tongue beyond its frontiers. Is it really a miracle that has been brought about by the political culture of Switzerland? A glance at life in Switzerland will make us realize that it is not so much a miracle as the result of an unquestioning adaptation to the peculiar conditions of life offered by the Confederation as a whole.

A Beautiful Country

Lying in the heart of Europe, Switzerland, in its small area of 15,941 sq. miles, has a wealth of natural beauty found hardly anywhere else in such a small space. The Alps, grouped round the Gotthard massif, are most impressive here; they reach their greatest altitude in Switzerland with the Dufour Peak of Monte Rosa, which is 15,217 ft. high. This majestic company of hoary peaks, visible from far and wide, is the landmark of Switzerland. Here too is the source of rivers which collect in innumerable valleys and flow to all parts of Europe. The Rhine, after 235 miles in Switzerland, flows onwards to the North Sea. The Rhone reaches the French frontier 165 miles away from its source in the glaciers and turns south to the Mediterranean. The Inn feeds the

Danube from the Grisons and so forms a link between Switzerland and the Black Sea, and finally the Ticino flows from the Gotthard to become a tributary of the Po, which in its turn empties into the Adriatic. Over forty rivers and more than 50 lakes have moulded the face of Switzerland. North of the Alps the landscape becomes broader and more peaceful, with hills and dales and fertile fields, only to soar upwards, between the Rhine and the Rhone, to the ridges of the Jura, a totally different kind of mountain, clothed with soft meadows and plunging steeply down into the valleys.

As the land changes from the wild glacier country to the southern mildness of the Rhone valley and the Ticino plain, the conditions of life which determine the character of the inhabitants change too. The type of house and settlement varies from district to district. While, in the Alps, wooden chalets cling precariously to steep slopes, the midland farmsteads stand broad and prosperous in their spreading fields. The solid, stoneroofted houses of the Ticino look as if they had been hewn out of the Gotthard rock; in the Engadine the sgraffito decorations on the white walls of the houses clustered round the village square lend them a dignity and charm all their own, while the quaint wooden cottages of Appenzell lend a peculiar charm to the green slopes on which they stand. The towns rise proudly above the rivers or cluster round the ends of the lakes, but none is like the other, and each is stamped with its own individuality.

A Poor Country

Part of the beauty of Switzerland is her very barrenness. The high mountains which form the most impressive part of the landscape mean that a considerable part of the land is bare rock, covered with ice and snow, and cannot be brought under the plough in the foreseeable future. The exact figures are even startling; of the 15,941 sq. miles which make up the area of Switzerland, only three quarters is productive while 3,758 sq. miles cannot be used either for agriculture or forestry. The Alpine region occupies about three fifths of the country, the Jura one tenth and the modest remainder of less than one third makes up the lowlands. It might almost be said that the beauty of Switzerland is the cause of her poverty. If we consider mineral wealth it is absolutely true, for apart from the rocks and soil put to industrial uses, it has not been possible to extract any minerals worthy of mention, although the geologists believe that oil drillings promise a certain amount of success. The miserably small coal mines of former days were set working again in times of scarcity during the two World Wars; a little brown coal was obtained in some parts of the country, and

"White coal" as
a natural source of energy

Productive land
strictly limited

the Valais produced some anthracite. The most productive source of fuel is still peat-cutting in the upland moors and ancient lake-bottoms; in normal times it is of purely local importance, but became useful in wartime. These were, however, mere emergency occupations which can scarcely be counted as permanent factors in the economy of the country. Of more importance are the iron ores which are worked in Gonzen and the Fricktal, while the other ores such as gold are merely a rare curiosity. The only reliable mineral resource is the saltworking in the Rhine valley above Basle and in the Rhone valley near Bex. There is, however, one gift of nature which, in combination with modern technology, can be fully exploited, namely water-power. Several thousand power stations, some 340 of them on the largest scale, transform the energy of mountain torrents and rivers into electricity. The peak production capacity is nearly 8 million kilowatts. In this way "white coal" has become pre-eminent as a source of the country's electric power and about 14,000 million francs has been invested in hydro-electric schemes. With full exploitation of her economically worth-while hydraulic power—which will probably be achieved by 1975—Switzerland will be producing 31,000 million kilowatt hours.

Since the Rhine was opened up to traffic in the 20th century, waterways have taken on quite a new importance for Switzerland. They mean above all direct communication with the sea and the possibility of cheap mass transport of goods. But if on the one hand modern technology have raised the value of water as a product of climate and terrain, it is that very climate which sets narrow limits to the possibilities of opening up new land in a country lacking raw materials. Of the 76.4%, or 12,179 sq. miles, of productive land, one third can be used only for pasture and so must be turned to purposes of stock-breeding. Another third is covered with forest. Agriculture of all kinds, food crops and vineyards account for another third of the productive land of Switzerland. But in 1961 open arable land totalled only 642,000 acres after having been increased to 877,000 acres during the second World War. The aim of agricultural policy is, however, to have 741,000 acres permanently under the plough to ensure a greater degree of self-sufficiency for times when the flow of imports might be interrupted, as well.

There is a wide discrepancy between the population of Switzerland, which according to the 1966 estimations stood at 5,953,000, and the natural resources at its disposal. Only about 50% of the people can be permanently fed on the produce of the soil, and 50% are permanently dependent on food imports. In spite of a large increase in the area of land under the plough during the second World War under the scheme of Professor F.T. Wahlen—a member of the Federal Council and Head of

the Federal Political Department from 1961 to 1966—Switzerland remained largely dependent on imported food. Even if the Wahlen plan had, in case of extreme necessity, been carried to the point of autarchy, it would have been at best a temporary solution which would have meant a considerable reduction in the standard of living.

Thus the Swiss have every right to think themselves short of living space. Other peoples, considering themselves in a similar situation, have laid claim to foreign territory, and enforced their claim by conquest. Switzerland, with its policy of neutrality, has solved the problem in another way.

Liberty, the Staple Raw Material

The fact that Switzerland, so insignificant a country from the economic standpoint, should have become the home of nearly 6,000,000 people, is due entirely to intelligence and hard work. Without the peculiar political attitude of the Swiss, it would have been impossible to raise the public economy of the country to such a level. Only a free people could attain this standard of living and only as a free state could Switzerland, remote from the sea coast and without her own sources of raw materials, succeed in commanding the respect of the whole world and in taking a prominent part in world trade. We have therefore every reason to regard the independence of the Swiss people as having the significance of a "staple raw material".

We must therefore enquire into the origins of that freedom. Under the Holy Roman Empire, the three communities of Uri, Schwyz and Unterwalden found themselves compelled to take up their own defence against the ambitions of the House of Hapsburg. The Empire was, after 1250, falling to pieces and could offer no protection. The three states therefore formed an alliance in August 1291—in fact, recent research puts the date somewhat earlier—for the defence of their independence by their combined forces. Here a new political principle was put into action. The Empire's mission had been to maintain rights and uphold peace; when its protection weakened, there arose in its place this alliance of free peoples whose tradition of self government had become very strong in the interregnum between the death of Frederick II in 1250 and the accession of Rudolf of Hapsburg in 1287.

The principle of this alliance was to ensure the independence of each separate member by the joint efforts of all. It established a complete and unconditional solidarity, diplomatic, economic and military. The enemy of one was the enemy of all, and when one was attacked, all were attacked. The idea of collective security had entered the world.

Liberty through unity



The "Everlasting League" sworn to by the three states in 1291 and renewed at Brunnen in 1315 became the true foundation stone of the Swiss nation. It controlled the important route between north and south over the Gotthard, and Switzerland's position as guardian of the Alpine passes has given her a peculiar political, strategic and economic importance. This importance was further increased by the building of the Gotthard railway in the 19th century.

The League of the three states in the central region of the Alps was strengthened by other communities which joined it. All had their powers and duties within the League laid down in special charters. The originals of these charters are preserved in the State Record Office at Schwyz; that of 1291 is written in Latin, while those drawn up from 1315 on are in German. The League had to struggle hard for its existence. Gradually it began to expand and to eliminate the influence of neighbouring lords, until finally the original founders had formed a solid League with Lucerne, Zurich, Berne, Glarus and Zug; later in the 16th century, it was increased by Fribourg, Soleure, Basle and Schaffhausen and then Appenzell. In this form it remained for three centuries as the League of Thirteen Members. The city and abbey of St. Gall, Bienne, Neuchâtel, Geneva, the Rhaetian Leagues and the Seven Tithings of the Upper Valais came in as "associate districts" with lesser privileges than full Confederates, whereas the Vaud, Aargau, Thurgau, and the Ticino were at that time subject territories, the three last-named "common bailiwicks". Basle, Schaffhausen and Appenzell undertook, under the terms of their deeds of adhesion to the Confederation, to "sit still" in the event of disputes between Confederates. They were not permitted to take sides, but could mediate: in this way neutrality became a positive element of the Confederation.

Beset by enemies

The solidarity of the League and the courage of its members were put to severe tests by renewed attacks from outside. At Morgarten, in 1315, the Swiss forces crushed the Hapsburg army, and at Sempach, where Winkelried sacrificed his life, they again defeated an army of Austrian knights. In the second half of the 15th century, a threat came from the West, and it was Charles the Bold, Duke of Burgundy, who fell victim to Swiss arms. Sooner or later, however, the clash with the Empire was inevitable, the more so as Switzerland was feeling increasingly alien within its slackening bonds. At the moment when the Empire set about reforming itself and restoring its power by the institution of an Imperial Court, when, moreover, it imposed an imperial tax, the League came into open conflict with it. In 1499, the victory in the Swabian War against the Emperor Maximilian meant the effective separation from the Empire, the final stage of a long development. Thanks to the skilful negotiations of Johann

Rudolf Wettstein, Burgomaster of Basle, who represented the Confederation, the Peace of Westphalia which brought the Thirty Years' War to an end in 1648 formally recognised under international law what had long been an accomplished fact.

However much these great feats of arms had inspired the Confederates with a feeling of their own strength, the League itself could never be used as an instrument of power politics, for it had come into being for the protection of each of its members and not for a common increase of power. If, however, a power policy was put into action, it became the concern of single members: for instance the conquest of Vaud by Berne in 1536. The conquest of the Duchy of Milan at the beginning of the 16th century, which ended with the disastrous Swiss retreat from Marignano in 1515, drastically showed the limits of the Confederation's power. The Confederation learned its lesson and thus decided to retreat from world history.

This vital law of abstinence in foreign policy was reinforced by inner necessity when the religious cleavage of the Reformation and the multiplicity of languages within the League imposed the principle which was later to issue in that of permanent neutrality. Once again Switzerland was seriously threatened when Napoleon set about changing the face of Europe with a total disregard for the facts of history. He unified Switzerland and called it "The Helvetic Republic", annexed part of its territory to France and divided the rest into cantons by a scheme which took in the former associate districts and subject lands. The experiment was short-lived. It is true that the old Federation of states could not withstand the reforms thrust upon it at the point of French bayonets and with the help of Swiss zealots; moreover, armed resistance was brutally suppressed by Napoleon's army. The Confederation broke up in 1798, but the idea of federation survived the victory of foreign arms. Hardly five years later, Napoleon himself, by the "Act of Mediation", replaced the moribund "Helvetic Republic, one and indivisible" by a new union. After his fall, the independence of the Confederation was formally confirmed and its neutrality recognized by the Great Powers of Europe.

After the Treaty of Vienna in 1815, the inner development continued, and the adaptation to changed conditions was made by the adoption of the Federal constitution in 1848. The old federation of states was replaced by the Federal state which, when the internal customs barriers and obstacles to trade had been abolished in the common economic territory, offered all the advantages of a uniform currency and customs duties, a common postal service, a centralized army and a progressive unification of law, civil and penal. Above all, a common organ was created for forming the public will and putting it into action.

Neutrality
the outcome of history

The Cantons as states

Free Communes

The Nature of the Swiss State

The form of the Confederation has changed, its fundamental principle has persisted. The system of multiple alliances based on treaties has been replaced by the Confederation as the federal union of twenty-two states. Where formerly the Diet merely existed as the organ "ad referendum et ad ratificandum" of the member states, the present Federal Assembly is the legislative power and the Federal Council the common executive power. Instead of the turnpikes on which at one time some 500 tolls and similar duties were levied, the Confederation has now a common frontier which, embracing the whole of Switzerland, makes it one economic area. In short, the unity and joint strength of the Confederation were reinforced in the interests of defence even in a completely changed world, and thus the conditions were created in which fullest use could be made of all the possibilities offered by modern technology.

Switzerland is, however, still founded on its member states, the cantons. They are, by the wording of the constitution, sovereign in so far as their sovereign rights suffer no limitation by the Federal constitution. The Swiss cantons are therefore not mere districts, and cannot be compared with the departments of the centralized French state or of Napoleon's Helvetic Republic. They resemble the states of the U.S.A., but their historical foundation goes much deeper, and they are genuine states, each with its own constitution, and its own legislative and executive bodies. The fact that this democratic constitution is prescribed by the Federal constitution is rather a confirmation of history than an act of the Federal Council. Their democratic character, however, rests on *the solid foundation of the communes*. Free citizens of 3095 free communes constitute in their totality the sovereignty of the Swiss state.

Swiss citizenship is primarily communal. Every Swiss has a home commune. It is true that to obtain Swiss citizenship the consent of the Confederation must first be obtained. What really matters, however, is the decision of the commune to admit the new citizen. The commune is the cell in the organism of Swiss democracy. All public activity has its origin here, and it is in every sense of the word a school of citizenship. For here, in the local self government of the communes, every citizen can take part in discussion and share in work. In the preamble to the Communes Bill of March, 27th, 1943, the government of the Grisons said quite rightly: "The commune is the prototype of the democratic organization. The small space of the commune is the given field of pure democracy; here every citizen co-operates in every decision and all governing bodies are elected by the people's vote. Here the individual can see the sources and the significance of every

decision, here he can see for himself the consequences of what he has done." The free commune is from the outset a vital element of the Confederation: It is from the commune that the Confederation draws its strength, and it is here that we can see the difference between Switzerland and countries which govern by means of a centralised bureaucracy. In Switzerland the national will grows from below upwards and even state institutions are modelled on those which have stood the test on a smaller scale. The commune, however, presupposes the liberty of the individual citizen. In its main features, that liberty has been guaranteed for the whole of Switzerland by the Federal constitution, in particular by the Proclamation of Liberties. All Swiss citizens are equal before the law and the constitution has expressly abolished all privileges of place, birth, family or person.

What is meant by the liberty of the individual is that the citizen has a right to a personal sphere free of state control, to freedom of creed and conscience, freedom of the press and freedom of assembly. Freedom of trade and industry also enters into this category, but in this case the limits are in a state of constant flux and are continually revised by the Confederation. The freedom of trade and traffic guaranteed by the Federal constitution of 1848 was first extended by the revision of 1874 to a freedom of trade and industry, which meant in those days that the economy of the country was henceforth liberated from guild and other privileges, and that freedom of movement all over Switzerland was guaranteed, the country having become a unified economic area by the establishment of the Federal state. The constitutional freedom of establishment also serves the same end, namely that every fully-qualified Swiss citizen may settle in any part of the country and may not be taxed higher than the citizens native to the place.

On completion of his twentieth year, every male Swiss becomes an active member of his commune, i.e. he obtains the vote in all communal, cantonal and federal affairs, and is himself eligible for election. At the same time he becomes liable for military service in the Swiss militia, which carries on in modern form the tradition of an armed people. In the Cantons of Geneva, Neuchâtel, Vaud and Basle City women are now also entitled to vote at both communal and cantonal level on reaching the age of 20. As active citizens they are eligible for election to public office just like men. Strenuous efforts are being made towards achieving universal equality of the sexes as active citizens which, however involves more extensive civic duties than the women's franchise obtaining in other countries. Introduction of these equal rights in Federal matters was again rejected in a plebiscite held on February 1, 1959, but the matter remains open.

The citizen's
constitutional rights

Political rights



One of the peculiarities of the Swiss state is *the combination of pure and representative democracy*. In the largely self-governing Swiss communes the citizen has to decide direct on local questions. He can—and in some communes must—be present at the assemblies. There are a number of cantons in which this convocation of the citizens still takes place annually in the form of a *Landsgemeinde* or folk-moot, as, for instance, in Unterwalden (consisting of the two half-cantons of Obwalden and Nidwalden), Appenzell Innerrhoden and Ausserrhoden, Glarus and certain communes in Schwyz. At the appointed time the citizens assemble on the public square of the capital of the canton. They can take part in the discussion, decide by show of hands what laws and financial measures are to be enacted, and elect the members of the government. Most cantons, however, have outgrown this form of direct democracy. All the same, the citizen has the last word everywhere, and his right to direct participation in the life of the state goes far beyond the right to elect the officers of the legislative and executive bodies and, in many cantons, the judiciary also. Here the cantonal constitution is the final authority. For instance, in the canton of Basle Country, every law enacted by the Cantonal Council, which is the cantonal legislature, must be submitted to the people for approval. In other cantons, the referendum may be brought into action. This means that, if a sufficient number of signatures is collected by the citizens amongst themselves, they have the right to demand that a law approved by the legislative assembly be submitted to the vote of the people. And now we come to *the referendum and the initiative*, that feature of Swiss democracy which is typical of its absolutely democratic nature and has been retained even in the Federal constitution. A bill approved by the Federal Assembly must, under the constitution, be submitted to the referendum. It becomes operative only if no petition is made against it within ninety days. But if a referendum is desired and a petition is submitted bearing the signatures of not less than 30,000 citizens, the final decision as to whether it shall become law rests with the people. The citizen has yet another means by which he can exercise the right of taking part directly in the affairs of his country, namely the initiative. By this instrument the people, given the support of 50,000 signatures, can demand that the Federal constitution be amended, or totally or partially revised. In the cantons, the public can, with a proportionately smaller number of signatures, propose amendments to the constitution as well as the adoption of new laws. Should the Federal constitution be amended, not only is the consent of the majority of the citizens required in every case, but a majority of the "states", i.e. the cantons, must be obtained also. This "double majority" is ascertained by first determining the majority of all votes, and

then the proportion of votes for and against the motion in each separate canton. If there is a majority of votes as well as a majority of cantons in favour of the amendment, it then becomes law.

The people as a whole as well as the cantons are responsible for the election of the legislature, i.e. *the Federal Assembly*. One of the two chambers, the National Council, is representative of the people and is, by the constitution, so elected that the 200 seats on the National Council are distributed among the 25 cantons and half-cantons in proportion to population, each canton, even the smallest, having at least one representative. Every canton forms an electoral area. In the autumn 1963 elections for the National Council, 200 Members were elected for a four-year period, 1,490,000 people being entitled to vote out of a total population of 5,400,000 according to the 1960 census. The 200 seats were allocated to the parties, as prescribed by law, in proportion to the number of votes they received. The National Council, in office until the end of 1967 thus comprised 51 Radicals, 6 Liberal Democrats, 53 Social Democrats, 48 representatives of the Conservative and Christian Social Popular Party, 22 of the Citizens', Farmers' and Artisans' Party, 10 of the "National Association of Independents", 6 of the Democratic Party and of the Protestant Peoples' Party and 4 members of the "Labour Party" (Communists).

The second chamber, called by the old cantonal name of Council of States, is elected according to cantonal legislation, either by elections in the cantons or by the cantonal authorities. It consists of 44 members, which means that each canton has two seats. Three cantons have been divided by Federal law into two half-cantons each: Unterwalden by a very old tradition into Obwalden and Nidwalden, Appenzell into Catholic Innerrhoden and Protestant Ausserrhoden, and Basle, after the violent conflict between town and country in the 1830's into Basle City and Basle Country. Each one of these half cantons is as independent a state as any canton, but in Federal matters they have only half a vote, and hence only one seat in the Council of States. This gives rise to the curious situation by which the canton of Basle City with about 240,000 inhabitants has only one vote, while the canton of Uri with only 30,000 inhabitants has two. According to parties, the Council of States has been composed, since December 1963, of 18 representatives of the Conservative and Christian Social Popular Party, 4 of the Citizens', Farmers' and Artisans' Party, 13 Radicals, 3 Social Democrats, 3 Liberal Democrats and 3 Democrats. Thus the bicameral system of the legislature keeps faithfully to the federal structure of the country as a whole. For a decision to be passed by the Federal Assembly, it must be approved by a majority in both chambers, the National Council and the Council of States, the representatives of the people and the representa-

National Council and
Council of States

Federal collegial government

tives of the cantons. Only a few matters are dealt with by the united Federal Assembly meeting under the chairmanship of the President of the National Council: these are the election of members of the government, that is of the Federal Council, of its President and Vice-President, of the Federal judges, of the General as supreme commander of the army in time of war or on "active service", and of the Federal Court of Insurance, and also questions of pardon.

The principles of the Federal Constitution, though influenced by the French Revolution, derive entirely from old Confederate sources. The bicameral system, on the other hand, was formed on the American pattern, the Senate serving as model for the Council of States, and the House of Representatives for the National Council. The U.S.A. had to solve the same problem of the representation of the people and of member states some decades before Switzerland. This solution has stood the test in America as well as in Switzerland, which, though much smaller, follows the same principles. The members of both Councils, however, vote without instructions; the Council of States, for instance, has no instructions from the cantons.

The Swiss solution of the problem of federal government, on the other hand, is entirely different from the American. In this country the collegial republic stands in contrast to the presidential republic of America, and the method of election of *the Federal Council* is entirely of Swiss origin. It corresponds to the collegial system which the cantons have developed for their own governments, except that in the cantons the determining factor is the people's vote.

The Federal Council is appointed every four years at the first December session of the Federal Assembly after the election of the National Council in autumn. It consists of seven members and they are jointly responsible for the government as a collegial body, while exercising at the same time the functions of head of the state. The same as for the National Council, every Swiss is eligible with the exception of the clergy, the only restriction being that several citizens of the same canton cannot at the same time belong to the Federal Council. On the other hand, the various regions of the country, languages, confessions and parties are taken into consideration in the election of the Council. Of the seven Federal Councillors in office in 1967, two were Radical Democrats, two Social Democrats, two from the Conservative and Christian Social Popular Party and one from the Citizens', Farmers' and Artisans' Party. Five of them were German-speaking, one French- and one Italian-speaking. One characteristic of the Swiss government, both in the Confederation and in the cantons, is its stability. Election to the Federal Council generally means re-election of the members in office as long as no resignation has been announced.

The annual election of the President and Vice-President of the Confederation by the Federal Assembly is a mere matter of routine. The former Vice-President invariably becomes President, the Vice-President being next on the list, which is drawn up by an old-established rule. The President of the Confederation is in fact the President of the Federal Council and "primus inter pares". He conducts the meetings of the Federal Council, and has various representative functions. He also heads his department—one of the seven executive departments each one with one of the Federal Councillors at its head, into which the Federal Government is divided. So there is no head of the state as in the U.S.A. or Great Britain; the President cannot dismiss his colleagues, there can be no cabinet crises and no votes of censure. Neither a parliamentary vote nor a referendum can cause the Council to resign. The Federal Council is responsible to the Federal Assembly, the representative of the people. The Swiss system of the formation of the political will of the state, with its reservations in favour of direct intervention by the people, may be complicated and cumbersome, but these drawbacks are amply compensated for by the solidity and stability which saves the country the costly adventures through which other countries under other systems have to live.

The third power of the state is the Federal court, *the Supreme Federal Tribunal*, which has its seat at Lausanne. The Federal judges are elected by the Federal Assembly for a period of six years. This court, with its four divisions, is the supreme court of Switzerland; its constitutional division is charged with the highly political duty of protecting the rights of the citizen, yet it has no power to examine Federal laws for their constitutionality. Another juridical institution, of a specialized nature, is the Federal Court of Insurance, Lucerne.

What may seem a matter of secondary importance, and is yet typical of the whole structure of the Confederation, is the fact that there is no real capital of Switzerland. Berne is the seat of the governing bodies of the Confederation, the Federal Council and the central administration, as well as of such public institutions as the Post Office and the Federal Railway Department. Here too the Federal Assembly meets, so that it is in a peculiar sense the Federal city. Berne, however, has not become the centre of Switzerland: the forces that work for federalism have always been and still are opposed to it. Berne has remained the capital of the important Canton of Berne, but she is no Swiss Washington (with her proper federal territory) nor is she a Swiss Paris. Each canton has its capital, urban or rural, according to its nature. Economic and cultural life have often proved to be factors more important than the political, a fact that will become obvious when the Swiss towns are dealt with.

Primus inter pares

Supreme Federal Tribunal

Bernese Ober



We must now turn to a consideration of the Swiss people whose peculiar character is expressed through the Swiss state as described above.

The Swiss People

Six and a half centuries of common experience have given the Swiss people the most strongly marked national character in Europe, however much that character may seem to conflict with conventional ideas of what constitutes a nation. The growth of nationalism in Europe in the 19th century took place very largely on the basis of a community of language which the nations then identified with a common racial origin in order to justify the wars of conquest which afflicted the world. That Switzerland with her multiplicity of languages took no share in this movement shows clearly that doctrines of such a kind cannot stand the test of reality, and that it is neither language nor race which goes to make a nation. Common experience creates that similarity of mind and feeling which is the characteristic of national communities, and every state is the expression of a common political will. It often happens in bigger countries, or in countries with a minority speaking a different language, that the German-speaking inhabitants are classed as Germans, the French-speaking as French, and the Italian-speaking as Italians. Such habits are utterly alien to the Swiss way of thinking, for in Switzerland, no matter what a man's mother-tongue may be, he is first and foremost Swiss, and not German, French or Italian. Indeed in each of these languages as it is spoken in Switzerland there is a genuinely Swiss element which binds the people together and is itself the product of the encounter and mingling of different European cultures in the Confederation.

Four languages

In the earliest times of the Confederation, the Forest States, i.e., the Original Cantons, secured for themselves the territory beyond the Gotthard and subjected the Italian-speaking population in the "southern bailiwicks". The French-speaking "associate districts" Neuchâtel, Geneva and the Tithings of the Valais joined the League of Thirteen Members, while the conquest of Vaud by Berne further extended this language group. The Rhaetian Leagues, an "associate district" since the 15th century, brought Romansch into the Confederation as a fourth language. When the federated state of twenty-two cantons with equal rights created its constitution in 1848, these cantons came forward as the protectors of the language, religion and culture of the various sections of the population.

In consequence the Federal Union contained in itself the solution of the minority problem, which is a source of so much difficulty

in other countries. In no case does a language group become a majority or a minority with greater or lesser rights, whether in the cantons with three languages such as the Grisons, or with two, such as Berne, Fribourg or Valais, nor even in the Confederation itself. They have absolutely the same rights, and in each one of the cantons in question, as well as in the Confederation itself, the different languages are used equally for all official purposes, so that, for instance, speeches in the Federal Assembly are made in German, French, and Italian during the same debate. Only recently has simultaneous interpreting been introduced, and this for the National Council only.

All this must be kept in mind if the following figures are to be rightly understood. Of the Swiss population, according to the 1960 census, 3,764,000 were German-speaking (693 per 1000); 1,025,000 French-speaking (189 per 1000); 514,000 Italian-speaking (95 per 1000); 51,000 were Romansch-speaking (9 per 1000) and 75,000 people (14 per 1000) spoke languages other than these national tongues. All four languages are official national languages and may thus be used in transacting official business. Since the year 1880 there has been a slight increase in the German and Italian-speaking populations, while French and Romansch have slightly decreased, though the proportions on the whole have not been substantially changed. According to the 1960 census and omitting foreigners there are in the country 744 per 1000 whose mother-tongue is German, 202 per 1000 whose mother-tongue is French, 41 per 1000 Italian and 11 per 1000 Romansch. In a general way the different language groups live in geographically closed areas bordering on the country speaking that language. In the centre of the country, the linguistic border often runs right through the middle of a district, as, for instance, through the city of Fribourg, where the majority speaks French, and Bienne, where two thirds speak German.

In contrast to some other countries, the fact that the German-speaking population is in the majority does not mean that it has a dominating political influence, and the linguistic minorities are not political minorities. Political opinion in the Confederation is formed without respect to language barriers, and majorities and minorities are usually made up of all four language groups.

A peculiarity of the language situation in Switzerland is the importance which the German-speaking population attach to *their dialect*. In other countries, the use of a familiar form of speech is more or less a social matter; in Switzerland it has a national significance. The dialect is spoken by all classes exclusive of any other tongue and without reference to social status. The dialects classed under the general term "Schweizerdeutsch", which vary from valley to valley and from canton to canton, are the mother-tongues of the German-speaking Swiss, while literary

German has to be learned at school like a foreign language and is only used in writing. It is also used on official and formal occasions, for speeches, sermons and debates, but it is only partially the language of the legislative councils and the courts. The Swiss regards his dialect as his native language and is determined to keep it as such. The dialects have found their way into literature too, but in general, German-speaking Swiss writers write in literary German since this gives them a larger circle of readers. There have, however, been writers like Jeremias Gott-helf who, enriching the literary language from dialect sources, have made it far more expressive. The Italian dialect, too, helps to give colloquial language in the Italian-speaking parts of the country a peculiar colour. In the French-speaking areas, however, the Swiss dialects are yielding more and more to the written language in everyday speech, although a characteristic regional accent remains to a greater or lesser degree.

Just as the multiplicity of languages and the differences in culture closely connected with them are a typical feature of the Swiss national character, *the various religions* also help to enrich this picture of a common national life. Like the other contrasts already discussed, the religious differences have been a powerful factor in educating the people in tolerance and in helping to build up the whole Confederation on respect for the rights of others.

According to the 1960 census, of every thousand of the population of Switzerland, 526 are Protestant, 456 Catholic and 18 adhere to other faiths or to none at all. Taking Swiss citizens only, the proportions change, there being 570 Protestants and 414 Catholics per thousand. By contrast, the majority of foreigners living in Switzerland are Catholic, viz. 802 out of every 1000, compared with 160 Protestants and 38 members of other denominations. The large-scale influx of Italian labour resulted in a particularly big increase in the number of Catholics between 1950 and 1960.

Religious tolerance

The question for Switzerland therefore is to maintain peace between the two great religious denominations both in their mutual relations and in their relationship to the state and at the same time to guarantee the small minority religious communities an undisturbed existence. This has been made possible by the principle of freedom of conscience and creed as laid down by the Federal Constitution. The Constitution has declared religious belief to be a private matter in which the state has no right to interfere but which has a right to the protection of the state against the domination of any other religious community. One way in which this is carried out is by the civil marriage, for all official civil acts are performed by the state and the commune, and not by the church. The state schools are open to all, without

Dialect—a national feature

prejudice to their freedom of conscience and creed. Thus Switzerland is a country of absolute religious tolerance.

There is no canton in which only one of the two great religious denominations is found, though there are cantons which are predominantly Catholic, such as the Ticino and Valais, and others which are predominantly Protestant, such as Berne, Vaud, Zurich and the two Basles. These proportions have somewhat changed of late, for instance in the canton of Soleure, where the increase of industrialisation and the immigration consequent upon it have reinforced the Protestant element, so that the city of Soleure, which once had a Catholic majority, is now preponderantly Protestant. The Old Catholic Church, which separated from the Roman Catholic Church in the 19th century, is represented in the cantons of Soleure, Aargau and the two Basles. On the other hand the Catholic element is growing stronger in the great centres of the Reformation, such as Basle, Zurich and Geneva. Every religion has equal rights in this tolerant country. This tolerance, however, is not merely the product of the political necessity for adaptation in a country with a very varied population. A much deeper motive lies behind it, namely the attitude of a Christian state whose constitution begins with the words "In the Name of Almighty God". Even the first charter of the old League began with these words, for the oath of mutual assistance sworn in 1291 began *In nomine Dei*.

Town and Country

Another detail which goes to make up the variety of the Swiss people is the contrast between town and country, urban and rural. In very early times, cities came to join the old, purely rural League. Culturally, economically and politically they formed a clearly defined factor in it. While the population of Switzerland increased from 2,390,000 to 5,430,000 between 1850 and 1960, the population of the towns (communes with not less than 10,000 inhabitants) went up from 154,197 in 1850 to 2,300,000 in 1960. Hence the relative proportions of town and country have seen a radical change which is actually due to the change in the conditions and possibilities of life, which also found expression in the transformation of the federation of states into the Federal state. Of this 2,300,000 urban population in 1960, about 1,100,000 were living in five towns with more than 100,000 inhabitants, namely Zurich 440,600, Basle 226,000, Geneva 176,000, Berne 163,000 and Lausanne 126,000. In 1850 these five towns had a combined population of only about 120,000 (whereas at the end of 1965 it was 1,116,500). Eight other towns with populations of between 30,000 and 100,000 were Winterthur 80,300, St. Gall

76,300, Lucerne 67,400, Bienne 59,200, La Chaux-de-Fonds 38,900, Neuchâtel 33,400, Fribourg 32,600 and Schaffhausen 30,900. This, however, does not exhaust the list of Swiss towns. There are many Swiss townships with fewer than 10,000 inhabitants, lovely old places with towers dominating the landscape, but their actual economic importance puts them in the category of rural communities.

Even as late as 1850 there were not more than eight towns with a population of over 10,000 inhabitants; the biggest was Geneva with 31,238. According to the census of 1888, Basle headed the list with 69,809. At the turn of the century, however, Zurich stood at the head with 150,703, and it has continued to grow by incorporating more and more suburbs. It is now the biggest town in Switzerland, while Basle and Berne have not grown to any extent worth mentioning; in the case of Basle the reason is that the suburbs are in Basle Country, being separated from the town by the cantonal frontier. But none of the "big five" Swiss towns comes anywhere near that type of international metropolis which is to be found even in small countries like Belgium, Holland, Denmark or Austria. None has become so top-heavy that it has ceased to bear any proportion to the size of the country. While the recent growth of the population of Switzerland is a growth of the urban population, which now makes up more than a third of the whole in the communes with over 10,000 inhabitants, the urban element is none the less decentralized. The industrialization of Switzerland took place without the growth of huge towns or the proletarianisation of the masses, and nowhere in Switzerland are there the gloomy industrial centres which have sprung up elsewhere.

Switzerland as an Industrial Country

The new conditions of life and the new opportunities they afford are, above all, the result of modern technology, which has revolutionized production and means of transport. With its aid the Swiss, in the hard struggle of a small nation for a free existence, have been able to find some compensation for the natural poverty of their country. We have seen how the population has doubled in the course of a century without the slightest addition being made to Swiss territory. Yet Switzerland was incapable of supporting even her former population out of her own resources. Emigration began early, and one of its most notable forms was mercenary service. The old Confederates had won great fame in war, and were hence much in demand as fighting men. Thus they emigrated in masses to serve as mercenaries in foreign armies until the practice was forbidden. From the 15th to the 19th

century, about two million Swiss served in foreign armies. But if the Swiss for a long time exported their men, they now export, in growing measure, their goods.

Industrialization began in the 16th century and continued till, by the end of the 18th century, Switzerland was, relatively speaking, a highly industrialized country. We have a famous authority for this in Goethe, who describes in his Swiss travel notes how cotton was brought over the Alps into Eastern Switzerland to be spun and woven there. Indeed, the cotton industry was founded in Switzerland earlier than in England, the silk industry earlier than in Lyon, and the textile and machine industry earlier than in Saxony and the Westphalian Rhineland. The capitalistic form of enterprise, which unites technical and commercial qualities in the employer, also dates from the end of the 17th century. At that time more than a quarter of the 1.6 million inhabitants of Switzerland were working in the textile and watchmaking industry for export.

Today more people are employed in Switzerland in industry and manual trades, which we take both here and below to include such branches of economic activity as mining, building and the supply of electricity, water and gas, than in any other sector of the economy, viz. 494 out of every thousand who earn their living. This figure is based on a sample check of the 1960 census results. As early as 1888, a census showed 416 out of every thousand gainfully employed to be working in these sectors. Only Belgium and Great Britain have a somewhat higher proportion of their working population engaged in these branches.

This high proportion of workpeople in industry is paralleled by the modest number engaged in work on the land. In 1960 only 116 out of every thousand were engaged in such basic production as agriculture, horticulture and forestry; the number in 1888 was 375. Next to Belgium and England, Switzerland has relatively the smallest number of people engaged in agriculture of any country in Europe.

The distribution of the rest of the working population is also typical of Switzerland as an industrial country, 134 per 1000 finding employment in commerce, banking and insurance. Another 100 per thousand are engaged in transport, hotel and catering and 76 in the liberal professions and administration. Domestic work accounts for 30 out of every thousand gainfully employed. It is clear how very much the growth of the Swiss population in recent times is based on the character of Switzerland as an industrial country with a highly differentiated economic structure. This fact is also underlined by the relatively large growth of the urban population.

According to the census of December 1, 1960, 2,514,000 out of a population of 5,400,000 were gainfully employed, while 2,914,700

Industrialization began early

The Swiss at work

did not earn a livelihood. Industry, manual trades and building employed 1,244,600 persons. A total of 587,900 people were working in commerce, banking, insurance, transport and hotels and catering but only 292,000 in agriculture and forestry, while 390,300 were employed in other occupations, including public services and domestic work. A total of 359,000 were self-employed and 2,155,000 were wage and salary earners.

A general industrial census carried out in 1955 and covering such sectors of the economy as mining, industry and manual trades, building, and electricity, gas and water supplies, showed there to be more than 120,000 undertakings employing a total of 1,160,760 full-time works and office staff. These undertakings vary widely in size, but by far the majority are small or medium firms. Amongst the 97,146 industrial or craft undertakings alone there are nearly 35,000 one-man businesses, and in another 53,000 no more than 20 persons are employed. Only 1355 concerns employ more than 100 people each—53 of these having more than 1000 on their payroll—yet they give employment to 421,000 persons or about 46 percent of all those earning a living in industry and the manual trades. The firms employing the largest numbers, i. e. with staffs exceeding 1000 persons, are engineering factories and iron and steel works. They account for 35 of the 53 industrial undertakings of this size. Of the others 7 are chemical concerns, 3 are textile and 3 watch factories, while foodstuffs, shoes, paper-making, printing and the production of fine mechanical and optical apparatus each number one firm with more than 1000 employees. Unlike the general industrial census, the factory statistics cover only those undertakings which are subject to the Factory Act, and the figures give an impressive picture of the expansion in this sector. Before the second World War, there were 8,365 firms with 360,003 employees, of whom 25,393 were foreigners, in 1950 11,475 firms with 492,563 employees and by 1965 the numbers had soared to 14,339 firms with a total of 768,382 employees, of whom 293,085 were foreigners.

The population census of December 1, 1960, reveals an intensification of the industrial character of Switzerland. The sustained economic boom led to a considerable expansion of many industries and to marked changes in the country's economic structure, there being a constant growth in the "third sector" of services, with a high demand on the labour forces. The labour shortage could only be met by recruiting more workers from abroad, so that in 1964 the number of foreign employees totalled 721,000. Of these, 29% were seasonal workers and 6.8% were so-called "Grenzgänger" without residence in Switzerland. The main contingent, namely 66%, was recruited from Italy, followed by Spain with 11.5% and Germany with 11%. Two fifths of all foreign workers without permanent residence in Switzerland

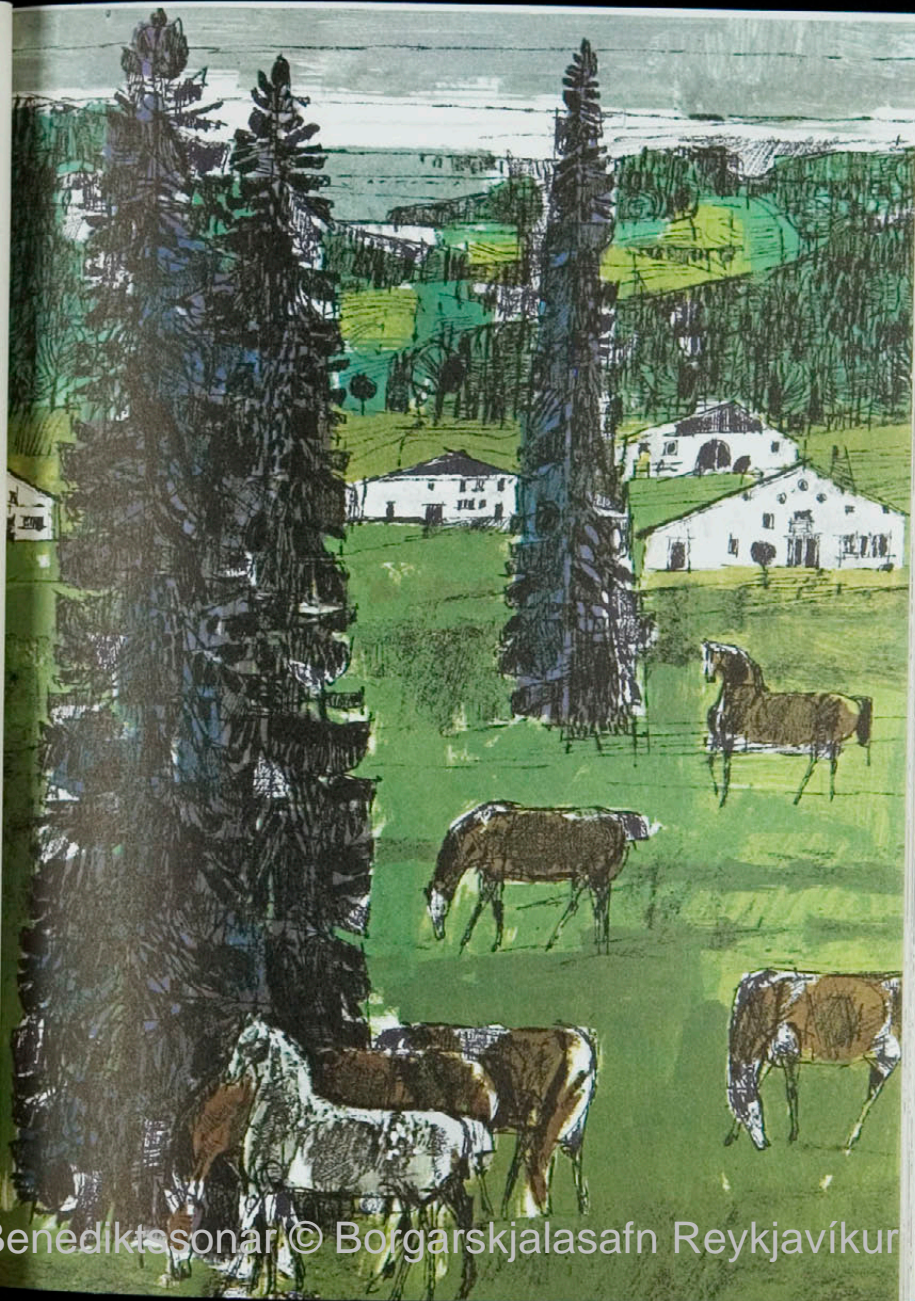
were employed in factories, their numbers being more than one third of all persons working in such undertakings. The economic development of Switzerland has always, to some extent, depended upon the recruitment of foreign labour, owing to the country's own limited population resources. But the rapidly increasing proportion of foreigners among the working population has created serious sociological and political problems, which have led to a tighter curb on labour permits issued to foreigners and to a reduction in the overall number of workers from abroad.

The Leading Industries of Switzerland

The industrialization of Switzerland began with the manufacture of cotton and silk, and for a long time it was the textile industry which employed the largest number of workers. In the 20th century, however, the manufacture of machinery took the lead, and the daughter now stands head and shoulders above the mother. Originally a mere subsidiary to the textile industry for the manufacture of the necessary machines and tools, the machine industry has gradually taken on an independent status and opened up new fields of activity. The trade census of 1905 showed an employment figure of 110,310 for textiles and 80,664 for metal-working. The census of 1929 showed that 10,000 fewer people were employed in the textile industry than hitherto whereas the number on the payrolls of the metal-working and engineering industries had more than doubled. In 1955 statistical returns showed that 322,080 were employed in metal-working and engineering against 82,142 in textiles.

The rapid progress of technology is continually opening up new prospects to *the metal-working and machine industry*. It now stands at the head of all Swiss industries for the number of workers employed, and at the last statistical survey there were 21,908 firms in this branch. It has progressed from the manufacture of spinning machines and weaving looms in the 19th century to that of water-wheels and turbines, and finally to the construction of steam engines, locomotives and embroidery machines. Since the 80's electrical engineering has developed, and Switzerland has done real pioneer work in connection with the electrification of railways, in which she played a leading part. At the beginning of the present century, the Swiss machine industry exported one third of its manufactures; in the years preceding the second World War, this figure had doubled. Electric locomotives from Switzerland or constructed under licence to Swiss specifications are to be found everywhere, as Swiss steam locomotives once were. The Diesel engines of innumerable foreign

Machines and instruments



ships are of Swiss origin. Switzerland also constructs agricultural machinery, and especially mills and silos for export all over the world. For some time, this country was the second biggest exporter of aluminium.

Watches

An industry allied to the machine industry, but requiring much more skilled labour, is *watchmaking*. Its origins go back to the 16th century, when its main centres were Geneva and the Neuchâtel Jura. Gradually it spread to Basle Country, to the canton of Soleure, to the Bernese and Vaud Jura, to Bienne and to Schaffhausen. In 1929 its employment figure was 55,465. Ten years later this had dropped to 41,379, but the number increased considerably after the end of the second World War, when there was a huge demand for Swiss watches all over the world, and reached 68,262 in 1955. The jewellery industry is closely associated with watchmaking, and in the years immediately preceding the war employed 2,500 persons, which number had increased to 4,500 at the time of the last survey. One of its allied industries, musical boxes, has gone over to the manufacture of gramophones, wireless sets and similar apparatus, and is now also employing about 4,700 persons.

The manufacture of fine mechanical and optical apparatus has made great strides in recent years and now provides employment for nearly 13,000 people.

Textiles

The textile industry, being dependent on the changes of fashion, has seen many vicissitudes. The fame of the silk ribbon industry of Basle, like that of the embroideries of Eastern Switzerland, has declined, but new possibilities are being opened up with the manufacture of synthetic fibres. The greatest decline in employment figures from the beginning of the present century to the outbreak of the second World War was seen in embroidery, silk and cotton, while other trades, such as wool, actually showed an increase.

Cotton spinning and weaving, which worked mainly with Egyptian cotton in peace time, have about 350 factories, with 1.6 million spindles, situated for the most part in the cantons of St. Gall and Zurich. With the exception of England, Switzerland is the only country with a well-developed fancy-weaving industry. While schappe silk and ribbons were mainly produced at Basle, Zurich became the centre for silk fabrics. Eastern Switzerland has the world monopoly in silk repp, thanks to the high quality of this manufacture. The rayon industry has its headquarters in Central and Eastern Switzerland. The embroidery industry in St. Gall, Appenzell and Thurgau still uses over 850 shuttles and 900 hand machines. The wool industry, the oldest textile manufacturing trade in Switzerland, operates more than 230,000 spindles and about 3000 looms; hosiery and weaving mills employed in 1955 13,590 workers in 999 concerns, while the linen industry,

which dates from the 14th century in the cantons of Aargau and Berne, employed about 3,400 persons.

Next to the building trade, which employs about 212,000 workers, the food industry, with 112,600, shows the largest employment figure, according to the latest survey. It has become famous all over the world for its cheese, chocolate, condensed milk and preserved foods; this is sufficiently obvious from the mere mention of such names as Nestlé or Ovaltine.

The various branches of the clothing trade employ in all 91,500 persons, so that it is almost as important as the textile industry. Swiss boot and shoe manufacture enjoys an international reputation and the name of Bally in particular is known all over the world.

One of the few industries which make use of a native raw material is the wood industry which, with the cork industry, employs 72,700 persons. Printing and publishing, with 47,500 employees, have of late become important industries, which is at once a testimony to high cultural, economic and political standards.

An interesting feature of the national economy is the growth of the chemical industry, which has mainly taken place in the present century. Since 1905 its employment figures have increased five-fold, and had reached 40,948 according to the 1955 industrial census. Its importance is to be judged less from its employment figures than from the prominent place it takes in Swiss exports; in 1955 a sixth of the total exports from the country consisted of chemical products, chiefly drugs and aniline dyes. The dyestuffs industry, which has its headquarters and its international research centre at Basle, and prepares coal-tar by-products, is of considerable importance. Together with its branches abroad, it supplies a considerable proportion of the world demand for dyes in the textile, leather, paper and varnish trades. It manufactures fadeless dyes for direct dyeing as well as colours for the printing of cotton, rayon, and linen, and high quality chrome, alizarin and neolan dyes for wool and silk. The pharmaceutical industry has grown up in connection with the Basle dyestuffs works and represents, along with another centre at Berne, a new and important industry, the value of its exports exceeding that of the dyestuffs industry. A new field of development has been opened up for the chemical industry in connection with the increase of farming during the war, namely products for the extermination of insect pests. Swiss perfumes have also won their place on the world market. Besides these enterprises in the field of organic chemistry, the inorganic chemical industries are important for their production of salts and acids, and no less important is the electrochemical industry, which manufactures carbide, sodium and iron alloys.

Food industry

Clothing

Chemicals and
pharmaceuticals

The Economic Importance of the Swiss Industries

The above sketch has done no more than touch on the most important industrial groups, yet it brings to light the astonishing fact that Swiss industry is dependent on foreign raw materials or partly manufactured goods and that the greater part of what it produces is not sold on the Swiss market. Swiss industry brings foreign goods into the country, improves or finishes them and exports the result. The initiative and skill of the Swiss entrepreneur and worker, together with the possibilities open to them in a free country, provide the Swiss with the means of buying the commodities which their own country lacks.

Basis of industry

The natural factors which have made for this industrial development are firstly, the geographical situation of the country, secondly, and in still greater measure, the abundance of water power. Yet political and historical factors have been exceedingly important. As Switzerland was only very slightly affected by the Thirty Years' War, there was no interruption in her economic development as in the neighbouring economic area of Upper Germany. This continuity has been maintained thanks to the principle of neutrality which has made of Switzerland an area where peace is relatively assured. Even general and compulsory military service has not led to the formation of a standing army, an institution that deprives a country of a good deal of productive labour. Up to date figures are not available, but in France, to take a historical example, for every 1000 men employed in 1910 there were 29 professional soldiers, in Germany 23, while in Switzerland there were only 2. The religious refugees who came into the country in the 16th and 17th centuries were also a great asset, as they brought both new industries and capital with them. Further they brought their experience and gave a fresh impetus to trade. They found efficient labour in the country whose citizens they could now become on condition that they offered no competition to trades already established. The absence of large landed estates in Switzerland is another factor which has worked in favour of industrialization, for it has meant that capital has been invested very largely in industry. Thus Swiss industry has had the advantages of cheap capital; on the other hand it has had to employ skilled and expensive labour, and thus has specialized increasingly in quality products. In 1913 a unit of Swiss export goods represented a value of 158 Swiss francs, whereas for France the figure was only 32 francs and for Germany 10 marks per unit. It is only by virtue of its quality that Swiss industry has developed to its present extent and proved a blessing to the whole country.

A Peaceful Conquest

Switzerland, with a population of 337 to the sq. mile according to the 1960 census or, what is of more practical significance, of 440 to the sq. mile of productive land, is one of the most densely populated countries in Europe, and, considering the poverty of the soil and the distance from the sea, is actually over-populated. This problem has been solved by a peaceful conquest. The Swiss have extended the cramped living-space given them by nature by creating for themselves a living-space in other countries. The Swiss turnover in world trade places Switzerland third among all countries in proportion to her population. This is all the more remarkable as the country, owing to its inland position, has no direct sea-borne trade. Swiss trade figures are exceeded by those of two other small countries, both of which, however, have an active sea-borne trade, namely Holland and Denmark, the capital of the latter being to a certain extent the key to the Baltic. In 1925, for instance, the Swiss share in the total world trade was 1.4%, the same as that of Denmark, Brazil and the Dutch Indies. Italy's share at the same time was only double that of Switzerland in spite of a population ten times as big, and a maritime situation. France too, with a population ten times larger, with sea coasts on the Atlantic and the Mediterranean and vast colonies, had only 6.8% of the world trade for the same period. In 1938, a year of many crises and threats of war, Switzerland had a 1.5% share in the total import trade and 1.3% in the total export trade of the world. In 1955 these shares were 1.7% and 1.6% respectively.

Swiss imports in 1913 amounted to 1,920 million francs, and exports to 1,376 million francs. This was 853 francs per head of the population. The war, while causing restrictions in the exchange of goods, brought an enormous rise in the value expressed in francs, which was, however, due only to the increase in prices brought about by the war. After the crisis which followed this tendency had been overcome, Switzerland imported in 1929 to the value of 2,731 million francs, and exported to a value of 2,098 million francs, or 1,201 francs per head of the population. In the crisis years of 1935 and 1936 this turnover was still only somewhat over 500 francs, imports being valued at 1,200 million francs and exports at 800 million francs. Then it again rose gradually, reaching 759 francs in 1939 with imports at 1,889 million francs and exports at 1,298 million. If we take the last year of peace, 1938, Switzerland had a foreign trade turnover of 698 francs per head, while Italy had only 81 francs, France 160 francs and Germany 166 francs. Great Britain had no more than 430 francs and the United States 116 francs. In 1960 Swiss imports climbed to 9,648 million francs and exports to 8,110 mil-

Trading with the world

Europe biggest trade partner

lion francs, equivalent to a foreign trade turnover of no less than 3,288 francs per head of the population. After the second World War the per capita export ratio was for a time greater than that of any other country. In 1960 it was exceeded only by Belgium and equalled by that of Holland.

It is obvious that the chief countries providing a market for Swiss goods and supplying Swiss needs must be those in Europe. A year before the first World War, four-fifths of Swiss imports came from Europe, which took in return three-quarters of Swiss exports. Before the second World War the proportions had not substantially changed, as about three-quarters of the imports came from Europe and about seven-tenths of the exports were taken by Europe. These figures show how particularly closely linked Switzerland is with the fortunes of the continent of which she is part. In 1966 Europe took 65.9% of Swiss exports, 38% going to the neighbouring countries of Germany, Italy and France and the other three Common Market countries, which themselves accounted for 60.4% of Swiss imports. All European countries together provided 80.2% of Switzerland's imports, Western Europe, as with exports, having the major share. But it would be a mistake to disregard the fact that trade with other continents is also vital for Switzerland. In 1966 34.1% of Swiss exports went to overseas destinations, while the proportion of imports from overseas was 19.8%. Altogether Switzerland trades with over 100 other countries.

World-wide links

Swiss world trade, however, has a much wider scope than a mere exchange of goods. The export industry cannot completely finance the demand for foreign foodstuffs, raw materials and manufactured articles. The excess of imports over exports is a normal feature of Swiss public economy. In 1929, for instance, that excess amounted to no less than 633 million francs, in 1932 to as much as 962 million. In the years before the second World War it was less, being 521 million francs in 1937, 290 million in 1938 and 592 million in 1939. Only in 1945 and 1953 was there an excess of exports (248 and 93 million). In both 1947 and 1948 the surplus of imports reached a figure of 1,500 million francs and in 1964 was exceptionally high amounting to 4,079 million. This excess has to be covered, since the world is hardly going to present Switzerland with so many millions.

The deficit has normally been covered from surpluses resulting from Switzerland's other business links with foreign countries. For instance the trade deficit of 2,801 million francs in 1966 was offset by net yields of 1,655 million from tourism, 1,370 million from capital yields, goods traffic 295 million, transit trade 135 million, export of electric power 128 million and exchanges of services between Switzerland and other countries 255 million. On the other hand the postal, telephone and telegraph traffic closed

with a deficit of 44 million on the Swiss side. The surpluses were large enough not only to cover the items in deficit but also to produce a credit balance of 530 million. Thus it will be seen that the most important item in the assets column of the Swiss balance of payments is the tourist industry, which employs some 140,000 people including 65,000 in the hotel trade, and in which 6,500 million francs has been invested. Income deriving from tourism is equivalent to 237 francs per head of population, against 93 francs spent by Swiss tourists abroad; Switzerland leads all other countries by a wide margin as regards both income and expenditure.

The capital wealth of Switzerland is based partly on the traditional thrift of the people, and partly on the fact that, owing to the economic and political stability of the country and its currency, a considerable amount of foreign capital is invested in it. According to the official valuation the national capital before the second World War amounted to 77,000 million francs, the nominal value of the securities issued by the public and private concerns being 22,000 million francs for the same period. For 1952 the national wealth was estimated at 140,000 million but since then this sum has greatly increased, both nominally and in intrinsic value. If, on the one hand, the industrial development of the country is due to the abundance of capital, the export of capital has paved the way for the export of goods. Not that this important economic connection is always maintained, but criticism of the export of capital in case of loss, more especially in the thirties, has been apt to overlook the necessity of this kind of export. Banks, especially promoting companies and insurance societies, take part very largely in this kind of transaction. At the end of 1965, Swiss assets abroad were estimated at 80,040 million francs and foreign assets in Switzerland at 36,400 million francs.

In this connection a brief word should be said about the *Swiss banks*. One result of the economic situation of Switzerland and the value of *Swiss currency* is the strong position of the National Bank, whose reserve of gold and foreign currencies in 1967 exceeded 13,000 million Swiss francs or more than enough to cover the total circulation of notes. Until 1945 there were seven big banks in the country which were subsequently reduced to five by amalgamation as a result of the war crisis. Their balances at the end of 1965 amounted to a total of about 33,870 million francs. They are, however, eclipsed by the cantonal banks, the state banks, which only do home business, and that mainly in mortgages. For the same period their balances amounted to 30,862 million francs. The 470 Swiss banks (including small and medium sized banks and land mortgage banks) and the 1,121 credit societies amalgamated into two associations showed a total balance of 96,787 million francs at the end of 1965.

Accumulation and
export of capital

The rôle of the banks

Their own funds amounted to 6,160 million francs and the deposits to 88,100 million francs; their aggregate net profits during the same year were 447 million francs and they paid out dividends totalling 243 million francs. The total savings deposited in banks stood at 39,000 million francs at the end of 1965, the average interest being 3.23%, while mortgages were obtainable at an average of 4¼%. For nearly 20 years these interest rates have sunk almost continuously until 1959. Finally there were, at the end of 1965, 49 finance companies and 53 investment trusts. Basle is the seat of the Swiss Bankers Association and of the Bank for International Settlements which also transacts business in accordance with the European Monetary Agreement.

Flourishing insurance

All over the world there are brass plates bearing the names of *Swiss insurance companies*. The insurance business is an economically important and lucrative factor in Swiss world connections, and can be so owing to its firm roots in Switzerland itself. This flourishing insurance business, like the savings, is a sign of Swiss reliability and at the same time a means of steady increase of capital. The year before the outbreak of the second World War, 825 million francs were applied by the Swiss to purposes of insurance and in 1964 this figure had increased to 7,921 million francs, including 1,585 million francs for the Old Age and Survivors' Insurance. Apart from the public insurance companies which insure against accidents and fire, and the Old Age and Survivors' Insurance, 68 home and 30 foreign insurance companies are licensed in Switzerland. Like the banks they are subject to special regulations and are under state supervision. In 1964 the 68 Swiss companies with their home and foreign business had a total premium revenue of 5,061 million francs in direct insurance and 2,117 million in re-insurance. In 1966 the income from abroad was estimated at about 210 million francs and the net proceeds for Switzerland's balance of payments at 205 million francs. In 1963 the Swiss insurance companies had at their disposal a fixed capital of 13,000 million francs and further assets of about 4,200 million, which will give some idea of the amount of capital invested in the business.

Traditional free trade country

It is not surprising to find that Switzerland, with her world trade, her tourist traffic, her big business and insurance and her large transit traffic is *the typical country of free trade*. This country, which only became a unified economic area after it had transformed itself into a federal state, and only had a central organ for an international trade policy after the Confederation had been formed in 1848, could maintain its tradition of free trade until, with Britain at its head, an international free trade trend began to approach the Swiss policy in the 19th century. Indeed, the British free trade theory was given considerable stimulus by

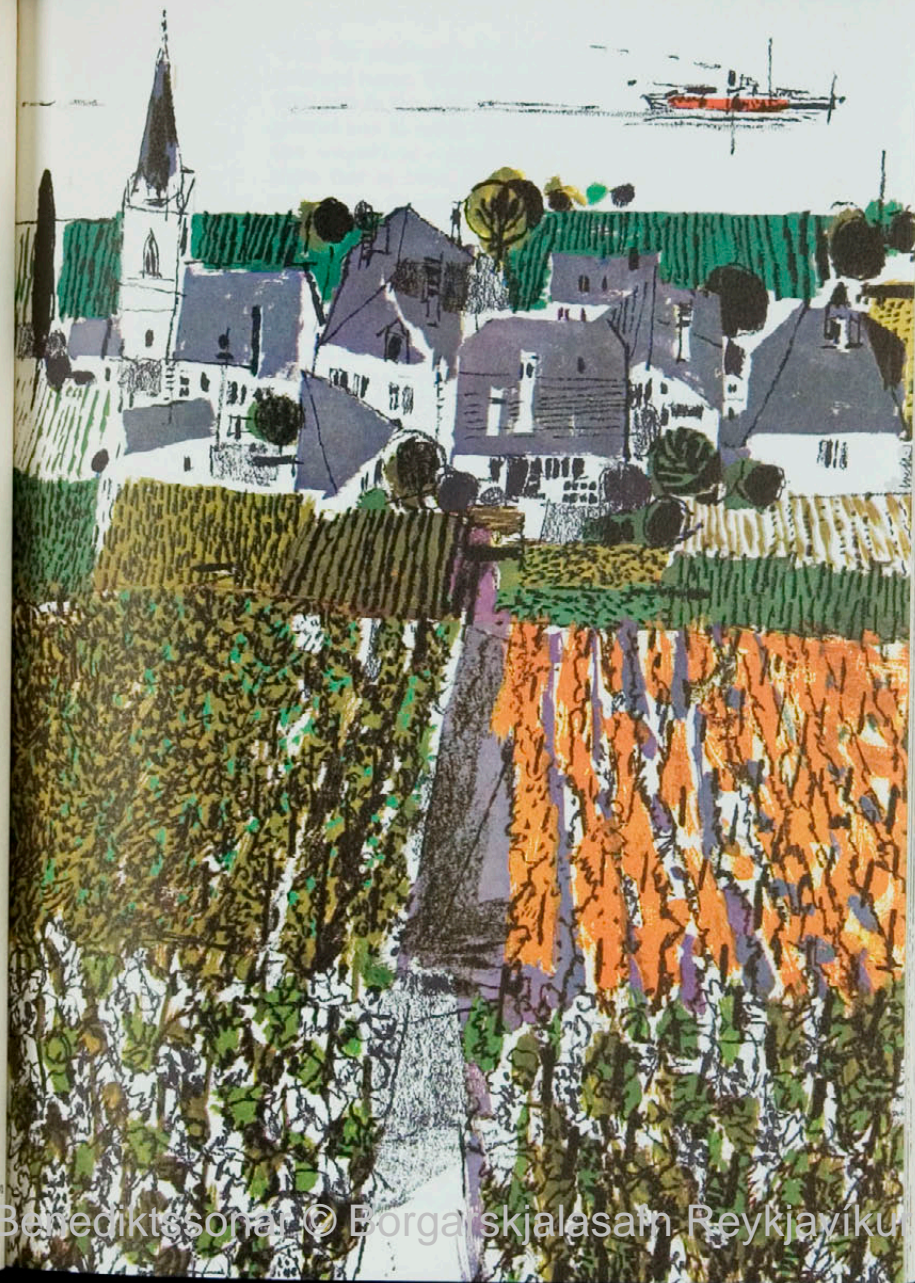
the successful Swiss practice, which was frequently quoted as an example. It was only under the pressure of the protectionist policy of the Great Powers that Switzerland was forced, against her will, to introduce protective tariffs. In the struggle for markets for her goods, she has, it is true, one great asset, namely her own need of imports, and it is that which has enabled her to preserve that world-wide "living-space" which she gained by her initiative, industry, reliability and quality.

Following the second World War Switzerland re-established her European economic links, spending 2,500 million francs, or 532 francs per head of the population, between 1945 and 1948 on aid for the needy peoples of Europe and on credits to their countries. She has played her part in the collective efforts towards European integration as a member of the OEEC (Organisation of European Economic Co-operation) and the European Payments Union and has joined, within the framework of the wider process of integration, the EFTA (European Free Trade Association) and the OECD (Organisation for European Co-operation and Development). At the end of 1961 Switzerland began official negotiations with the EEC (European Economic Community) with a view to eventual association.

The Swiss Abroad

In the economic sphere, Switzerland has been greatly helped by those of her country who have left it to settle in every corner of the earth. When the world was still open, before the war, people of all kinds of professions and occupations emigrated to foreign countries, both near and far, and found a livelihood there. In many cases they have risen to leading positions and in a general way the Swiss abroad have a good reputation thanks to their hard work, reliability and loyalty towards their adopted country. It has been calculated that in the hundred years preceding the first World War about 250,000 Swiss emigrated to the U.S.A.

According to the figures for 1928, the number of Swiss living abroad between the two World Wars came to about an eleventh part of the whole population of Switzerland and at the same time to about the tenth part of the native Swiss domiciled in Switzerland, the exact figure being 346,051. A quarter of a million were living in Europe; France, with the biggest Swiss colony, led with 144,000, then came Germany with 55,810, then Italy with 18,900. 83,140 were living in America, of whom 50,000 were in the United States and 15,960 in the Argentine. 7,091 were living in Africa, 2,470 in Asia and 1,470 in Australia.



Lake Geneva

With the outbreak of the second World War, a large number returned home. Firstly, those liable for military service came to take part in the defence of their country. Later, as the war progressed and its result became more devastating, greater numbers saw themselves compelled to come back. The latest statistics show that in 1964, 275,648 Swiss were still living abroad, the numbers in Europe having dropped more than overseas for the reasons already mentioned. There were nevertheless still 184,488 Swiss living in Europe, the greatest number being domiciled, as before, in Switzerland's immediate neighbourhood. The Swiss colony in France numbered 90,517, that in Western Germany went down to 31,542, in Italy to 18,803, while there were still 13,325 Swiss in Great Britain. In America the Swiss colony had gone down to 43,065; on the other hand the number in Asia had risen to 4,062, in Africa to 9,081 and in Australia to 3,322. These figures refer to Swiss nationals registered at embassies, legations and consulates and include persons with dual nationality who in addition to their Swiss citizenship have acquired that of their countries of residence.

Foreigners in Switzerland. A reciprocal migration has taken place which has been to the advantage of all concerned. We have only to recall the valuable contribution made by the religious refugees to the economic and intellectual life of Switzerland. In more recent times too, Switzerland has attracted valuable elements from other countries; just before the first World War, however, the political organization of the nationals of certain countries living in Switzerland made the problem arising from sheer numbers acute. In 1860, out of a total population of 2½ million, there were only 46 foreigners to every thousand Swiss. This proportion increased steadily until by the turn of the century it had reached 116 and in 1910 even 147 per 1000, i.e., more than half a million, of whom 40 per cent were Germans. During the first World War there was a certain reduction in these figures, due in part to emigration, in part to the naturalisation of foreigners. In 1920, out of 3.9 million inhabitants, 402,835 or 104 per 1000 were foreigners; in 1930 the proportion was 87 per 1000, or 355,522 out of a population of 3.7 million. The 1950 census showed that there were 285,500 foreigners, or 61 per 1000 of the population of 4,714,992, a figure that has been steadily increasing ever since and which in 1966 had already reached 859,987 (144 per 1000).

A People Rooted in the Soil

The problem of how to support a population whose total had risen to nearly 6,000,000 in 1966 but only about 50% of whom can

be fed on the produce of their own soil, has made the Swiss look far afield, in trade, commerce and the manifold economic activities in which they have proved their worth. Yet the Swiss have by no means abandoned the land. Agriculture and forestry account for a good eighth of the wage-earners, and together with their dependents they make up one quarter of the population. Moreover, if we consider the proportion of urban to rural population, the great decentralization of urban elements, the absence of big towns and industrial regions with purely urban settlements, we shall not go far wrong in inferring a strong attachment to the land even on the part of such groups as are not actively engaged in agriculture. For comparison there are interesting international statistics showing that in Switzerland, which after Belgium and England has the highest proportion of its people employed in trade and industry, a particularly large part of the total population lives in small towns or rural districts.

The rural character of the Swiss industrial settlements is to be attributed partly to the fact that industry began with cottage industries, and that, as the mechanization of the factories progressed, they remained on the spot, where skilled labour was to be found. This is shown in quite characteristic fashion by the two leading industries of the country, textiles and watchmaking. This tendency was strengthened by the use made of water-power, which is actually more readily available away from the towns, and finally the lack of raw materials in Switzerland liberated industry from the necessity of concentration on an area where they might be at hand.

There are districts in which the number of workers employed is far greater than that of the local population. Public and private means of transport bring them in at the beginning of the day's work, and after work is over, or at the end of their shift, they travel far back into the country again, for a large number of workers have their own small cottage and some kind of allotment or kitchen garden. An example of this decentralized industrial settlement is the Brown Boveri works at Baden. Only half of its approximately 15,600 employees live on the spot, the other half living in about 160 different communes as much as 45 miles away. It is not only a great social advantage to Switzerland that her working population has been preserved from mass settlements and proletarianization; it is also a political necessity for a small country of the Swiss type, where the greatest possible number of inhabitants must be, in the fullest sense of the word, citizens. The Swiss worker is not a proletarian, but a civic member of his community by his training and work, by his convictions, and by the esteem in which he is held by his fellow-citizens.

The Farmers

While, on the one hand, the worker is not alienated from the soil by his work even in branches of industry which are solely occupied in world export, while he remains bound to it by family ties, by his spare-time occupation or merely by living in the country, the Swiss farmer, in his turn, is not ignorant of world affairs. It is true that he produces for home markets, but his means of production, particularly fodder and certain fertilizers, come mainly from abroad. At the same time, a number of agricultural products have made a name for Switzerland on the world market; for instance, cheese, condensed milk, milk chocolate and patent foods, to name only the most outstanding examples.

Small farms predominate

Large estates are entirely unknown in Switzerland. The holdings are medium-sized to small. Out of a total of 205,977 farms, as shown by the last trade census in 1955, only 2,489, or not much more than one in eighty, have more than 14 acres of land; 25,091 have less than one acre and 57,288 have between one and seven acres. Thus about one-eighth are smallholdings rather than farms and close on one-third of the rest are very small farms. A total of 27,046 farms have between 7 and 12 acres while 53,267 have between 12 and 15 acres, one-fifth of these being in the Canton of Berne. Berne, which stretches from the Alps over the fertile plains deep into the stony Jura, has farms of all classes, from the mountain peasant struggling for a bare livelihood to the prosperous farmer in the plains. In the whole of Switzerland there are 24,925 holdings of 25 to 37 acres and only 15,891 have 37 to 74 acres. These figures show that the Swiss farmers, for the most part, live in very modest circumstances.

Production changes

The agricultural products are as varied as the land and the soil. The possibility of importing cheap grain from countries where natural conditions are more favourable caused the Swiss to turn to cattle-breeding and to convert their land into pasture. Since the second half of the 19th century the number of cattle has increased from a bare million to 1,700,000. Horses, too, the breeding of which is a speciality of the Franches-Montagnes in the Jura, increased from 100,000 to about 150,000, but their number has since declined again to 72,500. The breeding of pigs has so increased that in the 1930's it was three times more than the 300,000 recorded in 1866 and today the figure stands at 1,672,000. On the other hand the number of sheep has gone down from 447,001 to 249,100 and that for goats from 375,482 to 89,400. Cattle for breeding purposes are a very important Swiss export. The annual production of meat (240,000 tons in 1964) is sufficient to cover the country's need; and the same is true of the

production of milk, which varies between 297 and 330 million gallons yearly.

It was more particularly the two World Wars and the emergency created by the difficulties of importation which brought farming into the foreground again and led to the decision to keep 741,000 acres permanently under cultivation. Farm land was first extended during the war of 1914-1918, with the result that there was in 1919 an area of 517,000 acres of cultivated land, of which 340,000 were growing wheat. In the period between the wars the area of cultivated land fell to 453,500 acres but the new increased cultivation campaign brought the figure up to 877,835 acres. The potato crop, 207,500 acres, easily met domestic needs but wheat production, 534,000 acres, left a large gap to be filled by imports, although the normal bread ration was cut to just under eight ounces daily. In 1961 open cultivated land covered 642,500 acres.

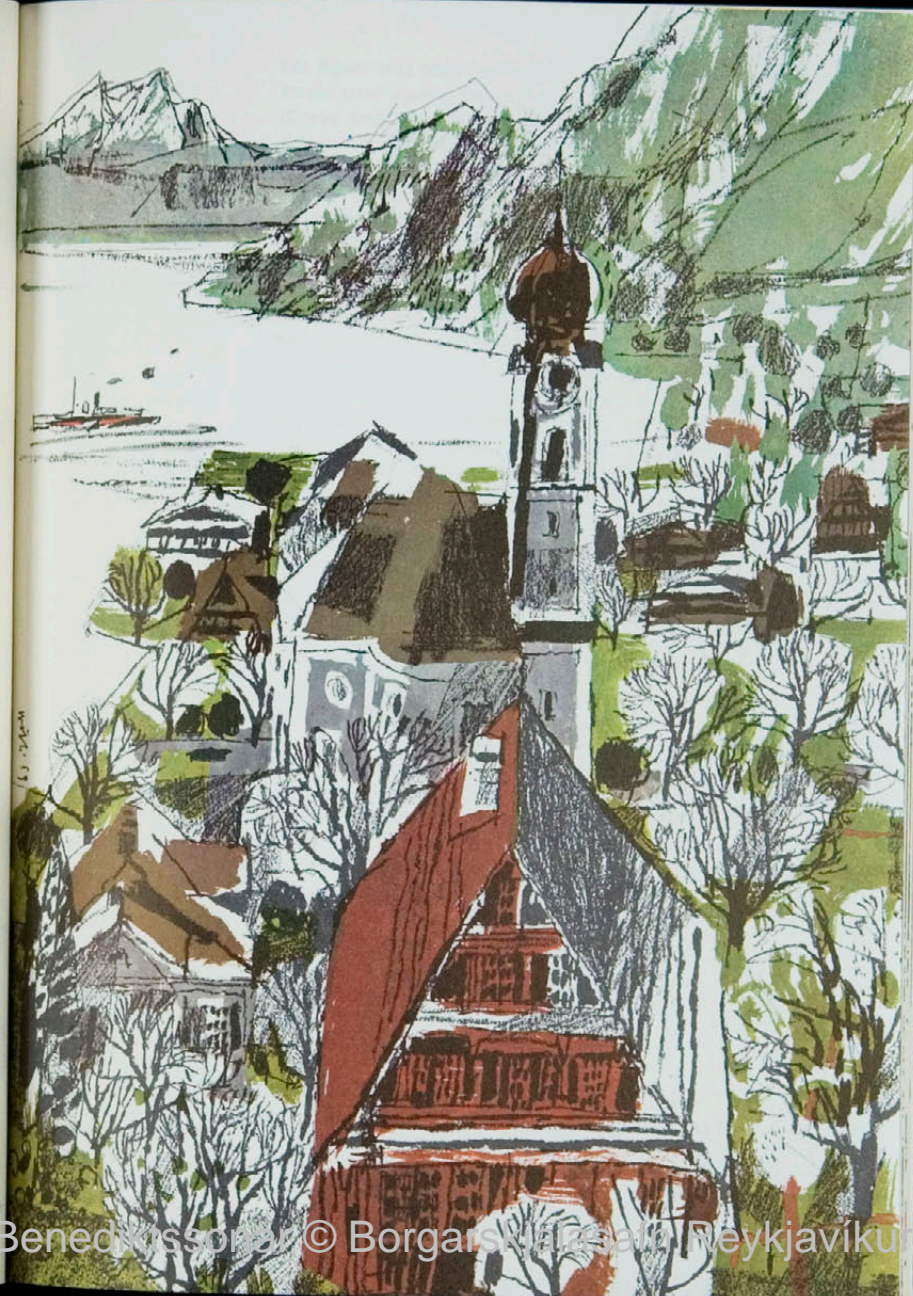
A prominent branch of Swiss agriculture is the cultivation of fruit, the various kinds of stone fruit and orchard trees giving the countryside its characteristic appearance. In 1964, when the total proceeds from the land amounted to 3,700 million francs, nearly one seventeenth was accounted for by fruitgrowing, an industry whose products are being steadily improved. In some years the proportion has exceeded one tenth. The fruit is partly exported, especially certain kinds of orchard fruit, as well as fruit products such as pectin. Switzerland has led the way in finding means of using fruit, especially in the manufacture of cider and fruit syrups.

Wine-growing is carried on in certain districts, particularly on the lakes of Geneva, Neuchâtel and Biemme, in the canton of Valais, on the lake of Zurich, in the Grisons and in the Ticino. Farm land is found at an almost unbelievable altitude; on the sunny slopes of the Valais Alps, grain is grown as high as 6500 ft. above sea level.

It is very necessary for Switzerland, both economically and politically, to have a sturdy and reliable farming stock. The more she can produce from her own soil for the maintenance of her people, the less dependent she is on imported foodstuffs, even though the full demand can never be supplied. From a purely biological point of view, such a farming stock is a source of regeneration, constantly bringing fresh blood to the race. It is an interesting fact that while only a bare 12% of all gainfully employed people are engaged in agriculture, together with their dependents they form a larger percentage of the Swiss population. That means that farmers' families are on the average larger, the country contributing much more to the growth of the population than the town. In 1960 the number of live births per thousand was 17.4 for the whole of Switzerland, but for the towns

Vital to the community

Lake Lucerne



the figure was only 14.7. Over the whole country the excess of births over deaths was 7.8 per 1000 in 1960, but in the towns it was only 5.1. During the second World War, however, the proportion improved somewhat, and it is worth while comparing it with the average for 1931-1935, which showed 4.6 for the whole country with only 1.6 for the towns, while in the following five years it was 3.6 for the whole country and only 1.1 for the towns. In 1936-1940, the excess of births over deaths fell to a minimum, which caused grave uneasiness. In the towns of Geneva, Lausanne, St.Gall and La Chaux-de-Fonds there was an excess of deaths and the canton of Basle City had an excess of births of only 0.7 per 1000. In the rural canton of Aargau, however, this excess was 5.7, in Soleure 7.5 and in the purely rural canton of Uri as much as 10.5. It is the rural population which has provided Switzerland with its coming generations, and as Switzerland was one of the countries with the most steeply falling birthrate, this introduction of fresh blood from the land was of the very greatest importance.

The very existence of the Swiss farmer is interwoven with the democratic and federative structure of a small country which was, at its origin, the creation of free peasants, and which finds in them, even in totally altered economic conditions, a great tradition of citizenship.

A Healthy People

The falling birthrate in Switzerland would be a much more serious matter were it not for the enormous progress in the preservation of life. Infant mortality has greatly declined and the expectation of life has steadily increased in the last generation. In the early years of the present century, out of every 1000 children born alive, 125 died in their first year; in 1965 the figure was only 18. Here the figures for some Swiss towns are especially good, their infant mortality having been reduced to as little as 14 or even 12 per 1000.

The general mortality, however, has decreased too, otherwise Switzerland would have no excess of births at all. At the beginning of the century there were 16.7 deaths per 1000 inhabitants; in 1965 this figure had fallen to 9.3 per 1000. This is due, besides the preservation of infant life, to the progress in medical science. In 1901, out of a population of 3.3 million, 12,979 fell victim to infections and parasitic disease, in 1965 only 1,474 out of a population of 5,900,000. Tuberculosis still accounts for the largest number of these deaths, 472, compared with 8,844 in 1901. In the same period deaths from

diseases of the digestive tracts have been reduced from 6,452 to 2,811 and those from diseases of the respiratory tracts from 8,793 to 2,755.

The result of this progress in the science of medicine and hygiene is a prolongation of life. The whole population on an average lives a number of years longer. At the end of the 1870's, a Swiss boy at birth could expect to live 40.6 years; in the early years of the present century this figure was 49.25 years, today it is close to 69 years. Female infants have always had a higher expectation of life, and the figure here has risen for the same period from 43.2 to 52.15 and finally to 74 years. This means that the average span of life has increased by over thirty years within the last decades.

This development has caused a considerable shift in the relative proportions of the various age groups. It is obvious that the mortality rate must increase again, for the longer expectation of life of the masses does not mean that the individual can prolong his life to more than what it used to be in former times. If the population of Switzerland is to keep at the 6,000,000 level, the birth rate will have to rise above the increasing death rate. Already warning signs are becoming apparent in the increase of the diseases of old age. Cancer and other malignant growths caused 10,654 deaths in 1965 compared with 4,189 in 1901, and diseases of the circulatory tract, especially heart diseases and arteriosclerosis, accounted for 24,311 deaths compared with 7,642 in 1901.

Unceasing efforts are being made to maintain and raise the standard of hygiene in Switzerland. Since the beginning of the century the number of doctors in Switzerland has almost trebled. It is now 8,339, or one practising doctor for 1,149 inhabitants, while there are also 2,336 dentists. At the end of 1960 there were 433 hospitals with 67,722 beds. In 1956 there were 54 people's sanatoria. Every year increasing sums are being spent in the fight against tuberculosis. In 1956, for instance, about 45 million francs were devoted to this purpose.

To promote the health of the people there is an active sports and gymnastic movement, the oldest and largest organization of which is the Federal Gymnastic Society with 281,584 members (1965). The second largest is the Swiss Workers' Gymnastic and Sports Union with 43,500 members, followed by the Swiss Catholic Gymnastic and Sports Association, membership of which stands at 43,293. A further 600,000 belong to societies devoted entirely to sports. The Swiss Alpine Club has some 50,000 members and the Swiss Riflemen's Association about 473,000. The majority of the organisations form part of the Swiss National Federation for Physical Recreation.

Living longer

An Educated People

High standard of education

The Swiss have reached a very high standard in education, as is only to be expected in a country whose citizens have such far-reaching civic rights and duties and where, above all, the means of livelihood depend on skilled and qualified labour. Switzerland has stamped out illiteracy. There are *seven universities* in this small country, with a total of 26,896 students and 1,900 professors, lecturers, etc. (winter term 1965/66); there is further the Federal Institute of Technology (including the Institute of Agriculture) with 5,550 students and 441 teachers, the School of Engineering in Lausanne, and finally the Graduate School of Economics and Administration at St. Gall with 1,377 students and a staff of 87. Among the universities, Basle, founded in 1460, is the oldest. All the others except for Neuchâtel, which was opened in 1909, were founded in the 19th century, but some developed from older academies. Of almost 27,000 students at the universities about 6,800 are foreigners as are 953 out of the 5,550 at the Federal Institute of Technology.

It is an equal tribute to the spirit of federalism and the intellectual life of the country that seven cantons should possess fully equipped universities of a very high standard, while an eighth, St. Gall, maintains an institute for further education of the standard of the Graduate School of Economics and Administration, and the Confederation itself provides the advanced technical instruction and initiates research projects through the National Fund for Scientific Research. All these opportunities for higher education and research work are very characteristic of Switzerland, and are a part of her intellectual life. The decentralization of the universities in no way detracts from their high standard. On the contrary, it creates a spirit of healthy rivalry which does not, of course, exclude close co-operation in special fields. In addition, university studies are brought within the reach of the greatest number of young people from all classes of society, since seven towns, including the biggest ones, give students the possibility of attending the university from their own homes.

The numerous universities, however, form only the last link in the chain of educational opportunities. The country which gave birth to Pestalozzi does not neglect *the education of the people*, and there is a widespread network of schools, subsidized by the state and under the direction of the cantons, which every child must attend for eight years. 571,548 girls and boys attend the primary schools, and there is an average of one teacher to every 34 pupils, not counting the 4,060 domestic science teachers and 1,672 auxiliary teachers. Then come the secondary schools with an attendance of 90,109 and the high schools with

31,674. Over 17,591 pupils prepare for matriculation in the high schools and the various types of cantonal grammar schools with the object of proceeding to the university (school year 1959/60).

Special courses in arts and crafts, commerce, agriculture and domestic science, which are attended by some 269,000 pupils and students in all, provide vocational training. Then there are the actual vocational training institutions, namely 31 training colleges for teachers, 44 commercial schools, 11 technical high schools with a leaving certificate and 8 technical evening schools, 49 manual trade schools, 40 agricultural schools, 48 domestic science and women's handcraft schools and 4 women's social schools with an aggregate attendance of 27,000. All these figures relate to the school year of 1959/1960.

The problem of elementary education is not an easy one in Switzerland, given the type of settlement. The decentralization of the high schools and secondary schools makes them more accessible, and the high school statistics plainly show that the body of students is recruited from all classes of the population. The scattered villages in the mountains, however, are far removed from the schools, and the children have to walk many miles to reach them. In the mountain cantons, where many families leave their homes in the valleys to go up to the Alpine pastures in summer, the problem has been solved by opening the schools only during winter. By concentrated work during the winter months, it is possible to cover the whole syllabus. Very often teachers in such schools take up some other occupation during the summer months, such as hotel work.

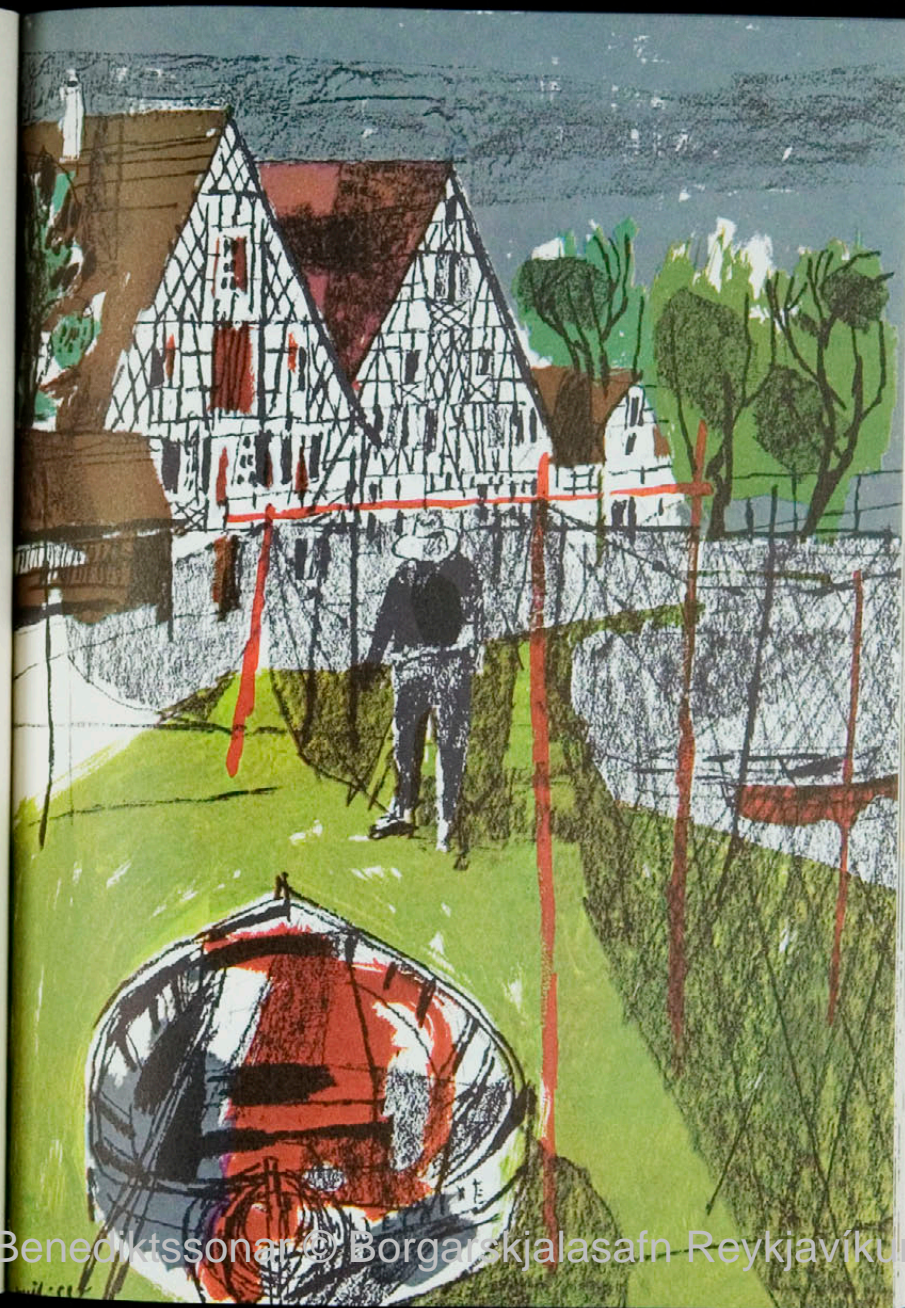
The private schools and educational institutions of Switzerland have an international reputation. They are for the most part boarding schools, and pupils come to them from all parts of the world.

One sign of the high level of education in Switzerland is *the large number of publications and libraries*. Public libraries have, taken jointly, acquired over 1,500,000 volumes annually in recent years, while about 8,000,000 books are taken out every year. About 2,000 new works were published annually in Switzerland up to 1940 but this figure greatly increased during the second World War and had risen to about 4,700 in 1948, remaining at a level of 4,500 a year since then. There are more newspapers in Switzerland than in any other country in the world; this may be accounted for by the democratic character of the government and the wide autonomy of the 3,095 communes.

It is not easy to give statistics for the rest of the educational and intellectual life of Switzerland. The university towns have a number of other organizations connected with places of higher education which considerably extend the scope of their activity.

Educational and
cultural centres

Lake Constance



To this category belong the evening classes and lectures and the various university extension schemes which are in some places organized by the universities and in others only financed by them. Then there are the museums, historical, ethnological and natural history collections, and the public art galleries. But these are not only to be found in the university towns. In other respects too, *Switzerland is rich in intellectual life*. Great Swiss artists such as Conrad Witz, Urs Graf, Niklaus Manuel, Hans Holbein, Buchser, Boecklin, Valloton, Calame and Hodler are represented in public and private collections. People's theatres flourish side by side with the regular theatres, which, in the bigger towns, produce plays, operas and ballets of a remarkably high artistic quality. In the field of music, too, Switzerland has produced international figures such as Arthur Honegger, Frank Martin, Ernest Ansermet and Paul Sacher.

The educational report for the year 1948 shows that 100 francs per head of the population was spent by the country on schools, a very high figure in comparison with the corresponding expenditure in the majority of other European countries. This figure has greatly increased since then.

Swiss Prosperity

The relatively high expenditure on education in Switzerland shows most clearly how well the Swiss have succeeded, as a free Confederation of states, not only in compensating for the natural poverty of their country, but also in creating a standard of well-being which is far higher than a mere subsistence level and characterizes the Swiss standard of living as one of the highest in the world. But the greatest cause for satisfaction is that the whole nation can share in this prosperity and that the class differences between rich and poor which exist in other countries have been largely levelled in Switzerland. There is, of course, a difference between the meagre livelihood of the mountain peasants and the life of the well-to-do farmers of the plains or of those in other walks of life. And there do exist certain exceptions to the general rule of well-being, the abolition of which is one of the primary duties of a state such as Switzerland. It is true that there are numerous individual causes of want which it is beyond the power of the public authority to put right. To abolish social causes of want, however, is a primary aim of voluntary social organisations, state and communes.

The social legislation of Switzerland is very old, and steady social progress is as deeply rooted in the traditions of the Swiss state as in its legal principles. During the second World War, great progress was made, particularly in protecting the soldier

and his family from distress. After the end of the war, attention was given to the ideal of a comprehensive Federal old age insurance and provision for widows and children such as was partly provided for in the cantons. The scheme was accepted by both the Federal legislative bodies in 1946 and voted for by the people in 1947. This entitles every inhabitant to a modest old-age pension, and thus supplements the numerous private and public pension schemes.

When making comparisons between different countries in the field of social policy, the varying social levels and the social policy requirements, which differ accordingly, must always be taken into account. In Switzerland the distribution of incomes and wealth is adjusted less by way of social policy than in countries where social contrasts are more extreme and the opportunities for self-help by successful participation in economic life are correspondingly smaller.

The war tax levied in 1945 to meet the costs of mobilization during the second World War furnished absolutely new and complete figures as to the wealth of the Swiss people. All property to a value over 5,000 francs was taxed, and more than 382,000 persons declared property above this limit, the declaration not covering household goods. The net property declared was 27,600 million francs. There were at that time 1.2 million households in Switzerland, with an average of 3.7 persons living in each, so that those paying the war tax, together with their dependents, would represent a good third of the Swiss people as being in possession of property of over 5,000 francs in value, not including household goods. This state of prosperity has already been mentioned in connection with the saving habits of the Swiss and the amount of money invested in insurance. A further proof is the fact that at the end of 1965 the 28,547 million francs in savings was distributed over more than 8.6 million savings books—a figure exceeding that of the population.

Before the second World War the aggregate wealth of the Swiss people was estimated to total 80,000 million francs and to be increasing by 1000 million francs annually. About one eighth consisted of natural resources whereas the rest was the work of human hands. A later estimate in 1952 put the figure at 140,000 million francs.

The annual net income of the Swiss people amounted to over 50,115 million francs in 1965 of which more than three-fifths was earned income, while about a sixth represented the earned income of persons working on their own account and living on the joint proceeds of their work and their capital. About 7.8% is purely interest on capital. Compared with 1938 the national income has roughly quadrupled. Bearing in mind the fall in the

How the national income is shared

value of money, the intrinsic value of this income has easily doubled.

A comparison with the national income of other countries for the period from 1925 to 1934, reckoning in dollars as purchase unit, shows that Switzerland had the fourth largest national income per head of the population, namely 1,036 dollars, coming after the United States with 1,397 dollars, Canada with 1,380 dollars, and Great Britain with 1,069 dollars. Countries with lower national incomes than Switzerland were New Zealand with 1,000 dollars, Australia with 952 dollars, Holland with 855 dollars, Sweden with 695 dollars, France with 694 dollars and Denmark with 680 dollars.

The working classes which contribute so largely to the aggregate national income have also a very large share of it. This can be seen, for instance, in the report of the International Labour Office for the year 1942 on the distribution of expenditure in working-class families in various European countries. In most parts of Europe, the major part of the worker's income is spent on the absolute necessities of life, namely 89.7% in Belgium, 79% in Sweden, and 78.7% in Germany, while the Swiss percentage of 76.7% is only excelled by that of England and Holland. The Swiss working class family therefore has on an average a quarter of its income for the satisfying of other needs than that of bare subsistence. This is again remarkable if we consider that rents are higher in Switzerland than in many other countries similarly situated. The Swiss worker lives in houses which correspond to the high standard of living in the country. Compared with other European countries for such factors as living space per person, and general comfort, housing conditions in Switzerland are decidedly superior. The equitable distribution of the national income and the substantial sums spent on welfare by private concerns have resulted in the burden imposed on the tax-payer by state security schemes being much lighter than in many other countries.

By intense productive labour, the population has compensated for the natural barrenness of the country, and thus changed a poor country into a rich one and made the wealth produced accessible to an ever-increasing number of people. It may be the very harshness of the natural conditions of their life which has led the people to produce such results. The political factor has had a decisive influence in raising and maintaining the wealth produced, for Switzerland has been able to avoid wasting her strength in political adventures and has protected herself from ruinous military embroilments. This blessing was achieved at the price of a lesser evil, the thousands of millions spent for the protection of her neutrality and other costly measures for the maintenance of her independence.

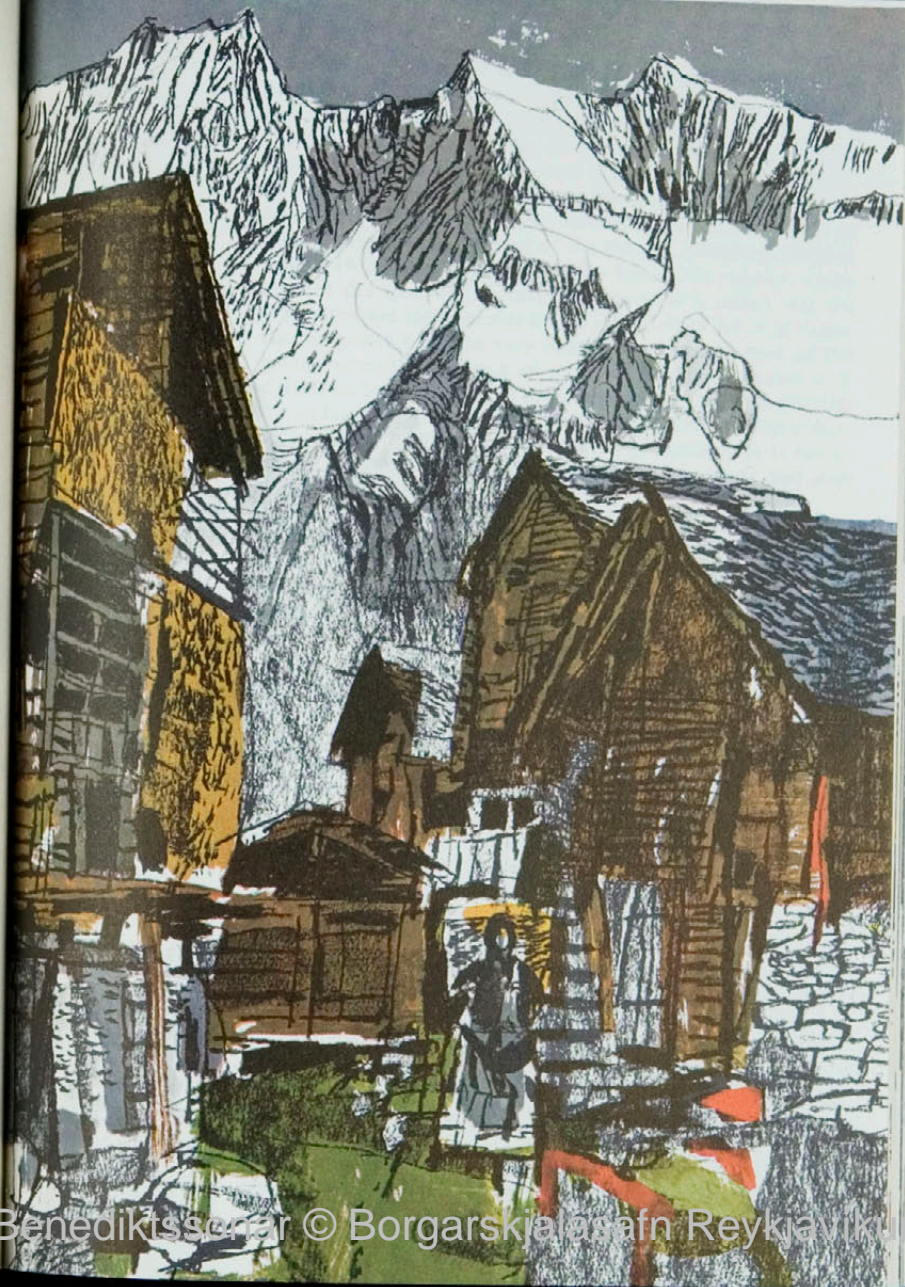
Switzerland as a Tourist Centre

An industrial country like Switzerland, situated in the most active part of Europe, with its production areas highly decentralized and trading with the whole world, must have at its disposal an extensive system of transport and communications. The Confederation was born along the central pass of the Alps, so that from the outset Switzerland was brought into close connection with the continental transport system. In course of time further important trade crossed the country, the rivers and lakes were navigated, and for a long time the Rhine bridge at Basle was the last possibility of crossing the river by bridge before it flowed into the sea. Everything in the situation and the economic development of Switzerland favoured the rapid construction of a transport system based on the most modern methods available, to become in time an indispensable factor in making the beauty of the country accessible to the tourist. By this means the completely unproductive wealth of scenery became an important element in Swiss public economy.

We learn from descriptions of travel in earlier times of the admiration foreign visitors always felt for the beauty of the Swiss landscape and the character of the Swiss people. But these descriptions open our eyes at the same time to the difficulties of travelling, especially in the mountain districts. Thus Goethe, in his travel sketches of a trip into the Valais, never knowing by what means he would be able to cross the Furka Pass, gives a vivid impression of travelling in Switzerland before the advent of the railway.

More than a century after the inauguration, in 1847, of Switzerland's first railway line, the country's railway system is over 3,450 miles long and is one of the most dense in the world. The construction of the first great tunnel (Hauenstein, 1858, 1½ miles long) and of the first tunnel through the Alps (Gotthard, opened in 1882, nearly 10 miles long) was pioneer work which presented enormous difficulties owing to the formation of the terrain. Switzerland was the ninth country of the world to establish railroads. The rack and pinion railway is a Swiss invention by an engineer named Roman Niklaus Riggenbach. It was used for the first time on the Rigi, from Vitznau in 1871 and from Arth-Goldau in 1873. The highest railway station in Europe was opened in 1912 on the Jungfrauoch, 11,203 ft. above sea-level. Most important of all was the *electrification of the railways* to such a degree that towards 1950 the steam engine was already a curiosity in Switzerland. By the end of 1959 only 70 miles or 2.6% of the network were still non-electric but they were mainly branch lines, so that steam traction actually plays a very subordinate part in the general transport system. By 1960 the Swiss Federal

Railway pioneers



Valais

Railways had achieved electrification of their entire network. The electrification of the Swiss railways began in the 19th century, and was carried out on narrow gauge lines, but already by the turn of the century the first standard gauge routes were operating, and in 1900 there were 215 miles of electric traction, of which 60 handled interurban traffic, the rest being predominantly tramways. A great step forward in the electrification of the railways was the opening of the Berne-Lötschberg-Simplon line in 1913, with its tunnel 9 miles long. This railway, which ends at the start of the Simplon tunnel (12 $\frac{1}{4}$ miles), was the first important international line to be laid down for, and to use, electric power from the very outset. Its success seemed all the greater when the outbreak of war in 1914 at once caused such difficulties in the import of coal to Switzerland that a calamity for all lines using steam power could not be averted. The system still covered 2,500 miles, and there was nothing for it but to reduce the train services, suspend all express trains and stop Sunday travelling.

Self-supporting
electric railways

This experience led to the decision to electrify the railways one after the other. A beginning was made with the Gotthard line, which had already been prepared for electrification in 1914. The erection of power stations and contact lines and the manufacture of electric locomotives provided welcome means of employment in the critical years after the war. Switzerland was thus the first country to electrify its railway system on a large scale. This enterprise gave Swiss engineers the opportunity to solve a large number of technical problems. When the second World War broke out in 1939, 2,880 miles out of a total of 3,685 miles was run by electricity. The electrification of the railways was continued energetically during the war, and the uses of electricity in industry and the home were multiplied. Conversion of all Swiss railways to electrical operation was completed in 1961. The extensive use of this home-produced power preserved the Swiss railway system from any severe reduction of traffic during the war, and helped to maintain the normal rate of transport. Owing to the lack of foreign oil and petrol and the impossibility of finding domestic substitutes for them, and owing further to the shortage of tyres, road traffic was reduced to a minimum. But the electric railways carried on. This shows in most emphatic fashion that Switzerland is amongst the countries which make the greatest use of electricity, for not only is the smallest village lighted by this means, but the most remote railway station can be reached quickly and without effort in a spotless electric train.

While the scenery of Switzerland is the great attraction for the tourist, water-power, that other gift of nature, has provided the country with the necessary means of transport. The many great

differences in altitude have been widely overcome by electric traction and the construction of mountain railways also shows great progress. At the end of 1964 the Swiss railway system comprised 2,246 miles of standard and 932 miles of narrow-gauge track, the cost of building which had amounted to over 5,000 million francs. There were also about 98 miles of rack railways and funiculars representing an investment of over 100 million francs. This high capital investment is partly due to the large number of special structures: 610 tunnels totalling 191 ¼ miles in length, 5,166 bridges with an aggregate length of 47 ¼ miles, plus 3 ½ miles of tunnels and 5 ½ miles of bridges on the 54 funiculars, the combined length of the latter being 38 ½ miles. The tramways, which at one time reached an aggregate of about 310 miles of tracking, have in recent years been replaced to a considerable extent by motor or trolley buses on routes where traffic is relatively light, but still incorporate some 162 miles of tracking representing a building investment of 230 million francs. The needs of tourists, in particular, are met by 230 aerial cableways and chairlifts, 311 ski-lifts and 28 convertible chair and ski-lifts.

In 1965 the various Swiss railways carried about 600 million passengers and 38 million tons of goods. The goods traffic was handled almost entirely by the standard and narrow-gauge railways, while the passenger traffic on these lines was rather more than half the total. The Swiss Federal Railways are the biggest railway undertaking in the country and came into being as a result of the amalgamation of the most important railway companies in 1903. When the first railways scheme was put forward, private enterprise, embodying the spirit both of regionalism and of federalism, carried the day, but the experience of half a century led finally to the nationalization of the railway system. The Swiss Federal Railways have an aggregate length of nearly 2,000 miles on which, in 1965 about 70 million train-miles were run. The extreme importance of electric power is shown by the fact that of the gross ton-miles recorded in 1965 more than 99% were hauled by electric traction.

The Swiss railways handle a large amount of transit traffic between the countries bordering on Switzerland and thereby contribute very considerably to covering the deficit arising from the excess of imports. But a larger contribution to the public economy comes from *tourism*. The term "tourist industry" sometimes used expresses the fact that tourism has an economic importance equal to that of any export industry. In 1966 foreign tourists spent in Switzerland 2,900 million francs, which, after deduction of 1,245 million francs spent by Swiss on foreign travel, left a net surplus of 1,655 million francs. The economic and social changes which have taken place since the beginning of the first World War have

Tourism
as an economic factor

had a profound influence on the tourist traffic. While in past centuries a trip to Switzerland was the relatively rare privilege of the well-to-do, the increase in railway and road traffic opened up the country to a wider circle of visitors. But the style in which the hotels were built and equipped indicates that the tourist traffic still consisted for the most part of wealthy guests. In the course of time increasing numbers of people from more broadly based sections have been holidaying in Switzerland. The first and more especially the second World War, however, also brought about a change in the composition of the clientèle, an increasing part of which was Swiss. Of the 19 million nights passed in hotels in 1912, 80% were accounted for by foreigners; of the 32 millions in 1966 only 59% went to visitors from abroad.

Wars, crises and other international events have always profoundly influenced the influx of visitors to Switzerland, and hence done great harm to the hotel trade and all the other branches of industry directly or indirectly concerned with the housing or transport of tourists. After the second World War, Switzerland found herself in increasingly sharp competition with other countries which were gaining favour with travellers, but at the same time new possibilities were opened up, above all winter sports, which stood Switzerland in good stead. The Swiss National Tourist Office was born of the effort to unite all interested parties who might encourage and develop tourism in Switzerland. Today it is responsible for publicising Swiss travel amenities throughout the world, and has branches in numerous foreign countries.

Tourist traffic largely depends on the ability to move freely from one country to another under all the economic, political and social conditions which such movement implies. New technical discoveries continually add to this freedom of movement, and amongst them air travel takes a prominent place. Switzerland entered the field of air travel early, and the Swissair line is noted for its excellent service. Air traffic is steadily growing, the figures reached in the year before the war being 2,200,000 flight miles, 75,937 passengers and 14,300,000 passenger-miles. In 1965, 4,440,000 passengers were carried and the total passenger-miles flown was 2,590,000,000 while 114,991 metric tons of freight and mail were carried.

More than 200 million francs were spent on the airports of Zurich-Kloten, Geneva-Cointrin and Basle-Mulhouse. To cope with the jet services, which started in 1960, and the steadily increasing volume of traffic additional investments of hundreds of millions have been made in Zurich and Geneva airports.

The hotels, too, have prepared for the post-war period and are able to meet new demands. At the end of 1965 there were 7,844 hotels (including sanatoria and other therapeutic establishments)

Exemplary hotels

with a total of 241,529 beds. The reputation that Switzerland has gained for herself as a holiday centre and health resort, as well as for her spas, is due to the beauty of her landscapes, the virtues of her climate and mineral springs and, to a large extent, to her atmosphere of hospitality. The hotels have contributed to the good name of Switzerland as a tourist country by the distinction of their service and a genuine art of hotel-keeping for which Switzerland has become the classical example. That example attained international status by the work of such men as César Ritz.

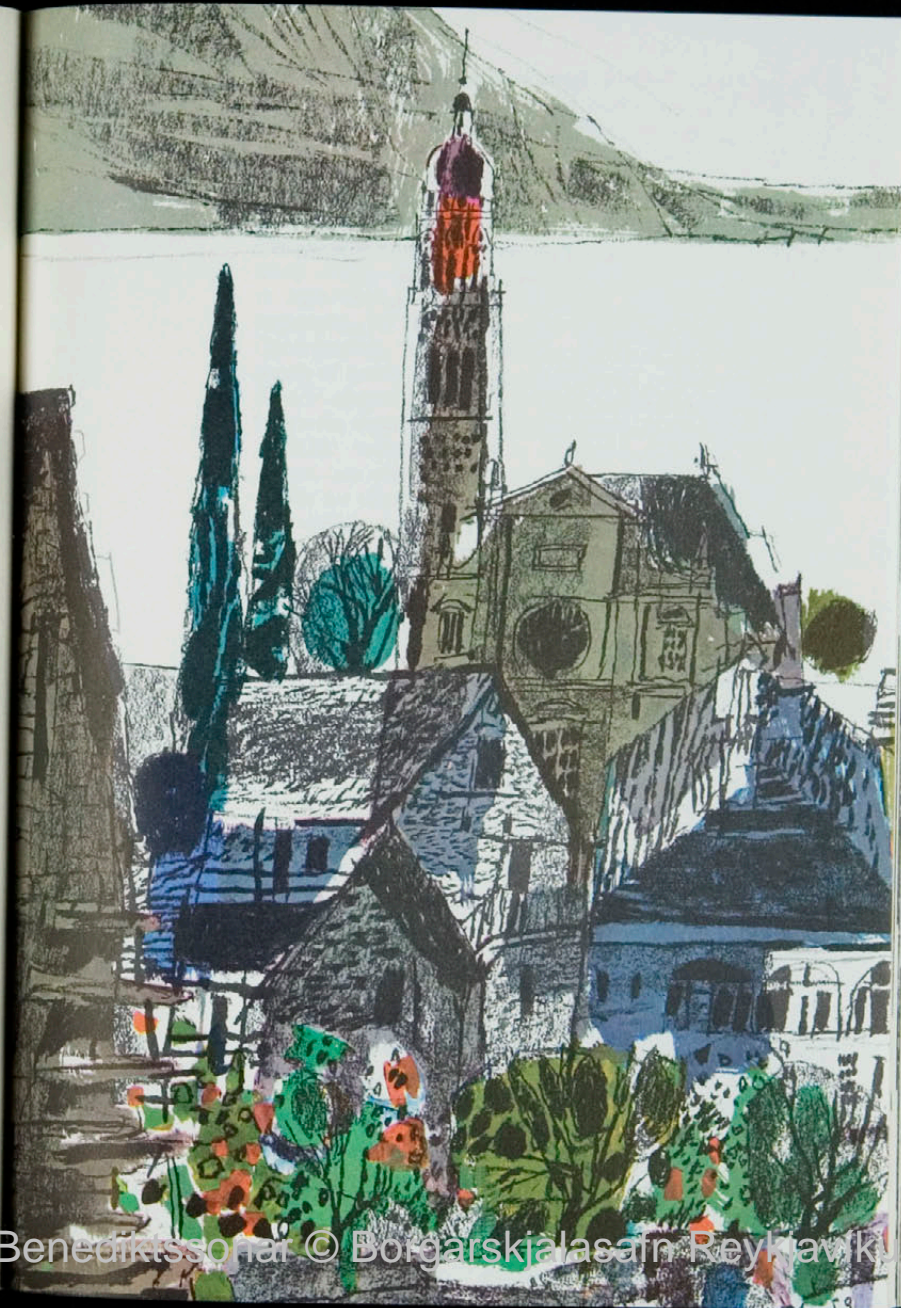
Far wider circles find their interests closely bound up with those of the hotels: mountaineering has created a class of well-trained and reliable guides, winter sports have profited from the ski-schools, all pledged to use a uniform technique and having at their disposal a small army of instructors who have made skiing one of the most popular of sports. To the same category belong the wood-carving of Brienz and the embroidery of Eastern Switzerland. And lastly of course come the farmers who supply a good deal of their produce to the hotels.

Navigation on Swiss lakes and rivers, though originating in the pre-railway epoch and serving mainly for goods transport, has received a great impetus from the tourist traffic. Some services are maintained by the railways, as for instance on Lake Constance by the Swiss Federal Railways and on the Lakes of Thun and Brienz by the Lötschberg Railway. Plying on the Swiss lakes are 115 passenger boats with accommodation for 57,068 passengers, and eight cargo boats. In 1964 they carried 9.3 million passengers and 348,800 tons of goods. On the Rhine 4 local boats carried 111,292 passengers between Basle and Rheinfelden.

In the 20th century, however, Swiss navigation attained great importance in quite another direction by the reopening of the Rhine shipping between Basle and the sea which had been interrupted by the advent of the railway. In 1903 the first attempt was made to re-navigate the completely derelict waterway between Strasbourg and Basle by means of tugs. The first Rhine steamer actually reached Basle as long ago as 1832, but the service, which included connections to London, was unable to hold its own against the railway constructed 12 years later, and vanished again in the 40's. The building of the docks began in 1904, and by the outbreak of the second World War there was over a mile of serviceable docks. The installations for flood-control on the Basle-Strasbourg section cost 60 million Swiss francs, and 60 % of this sum was met by Switzerland. The ports of Basle handled 8.4 million tons of goods in 1966. Thus Switzerland is in direct communication with the sea. In 1966 the Swiss merchant fleet on the Rhine consisted of 491 boats with a total tonnage of 457,469. In addition, the merchant fleet built up since the war

Down to the sea

Ticino



and navigating the high seas under the Swiss flag numbered 27 vessels totalling 138,684 tons. In 1948 a direct passengerboat service was inaugurated between Basle, Strasbourg and Rotterdam which, in 1966, with cabin motor ships carried 24,748 people from or to Basle.

Roads play new part

Road traffic, too, like the direct traffic between Switzerland and the sea, has received a fresh lease of life. At the time of the introduction of the railway, Switzerland possessed a comparatively well-developed road system which is now being improved to meet the new demands of motor traffic. The cantons are responsible for the building and upkeep of the roads, but the Confederation subsidizes them. The total road system has a length of nearly 11,250 miles and annual expenditure on it had risen to almost 1,428 million francs in 1964 besides 550 million francs for about 25,000 miles of local roads. In 1966 there were 1,300,521 motor vehicles in Switzerland including 1,006,783 private cars and 181,364 motor cycles. There is thus one motor vehicle for every 5 inhabitants or a private car for every 6. Foreign tourists and workers brought more than 29 million motor vehicles into Switzerland in 1965 and 71,000 tourist coaches arrived with 2.26 million passengers. A national motorway network, started in 1960, includes 237 miles of 1st class motorway with four carriageways, 233 miles of 2nd class motorway with three and two carriageways, long-distance valley and mountain roads and fast urban motor roads.

Public motor transport has been developed by the Swiss Federal Post Office and 144 private undertakings to cover a network of 6,213 miles of which 4,062 are served by the Post Office. In 1964, 68 million passengers were carried on this network, 37,000,000 travelling by the yellow postal coaches. To complete the picture, mention should be made of the 1,500,000 cycles—one for every four inhabitants.

The telephone system is a state monopoly administered by the Federal Post Office, and has, in the last generation, grown prodigiously. At the end of 1965 there was a total of 2,259,077 telephones and in that year 1,723 million calls were made. Switzerland thus has one of the highest telephone-population ratios in the world.

Wireless and broadcasting in the three official languages from the three national transmitters at Beromünster, Sottens and Monte Ceneri also comes under the technical administration of the Swiss Federal Post Office. At the end of 1965 there were 1,653,679 radio licence holders, i.e. more than a quarter of the total population. Television is the latest comer to the field of communications, programmes being broadcast from 7 transmitters and 4 relay stations. By the end of 1961 the number of television licences issued was approaching 200,000.

The whole Swiss system of communications corresponds to the many-sided and highly complex economy of the country, with its huge demand for travel and transport and its vital connections with the rest of the world. Switzerland is thus in a position to offer the maximum of comfort to the traveller.

The Place of the Confederation in the Family of Nations

The unique position of the Confederation among the nations corresponds to its unique character as a state. The public economy and the prosperity of the Swiss people are the result of the recognition won by Swiss material achievements throughout the world. Not only has the high quality of Swiss goods on the world market given the country its purchasing power to procure the goods which it lacks and cannot produce by its own resources, it has also made it possible for Switzerland to increase her population to nearly 6 million, a number far in excess of what the soil can support. It has even been calculated that of all European countries, perhaps of all countries in the world, Switzerland has the biggest population dependent on relations with the outside world. According to this calculation, the population is over twice the number that could be supported at the present standard of living from the country's own resources.

It is therefore unquestionably to the advantage of Switzerland that people as well as goods should move freely across the frontiers and that political conditions should be sufficiently stable to guarantee that freedom of movement. So it is a matter of vital importance for Switzerland that, besides the peace at home, which she has succeeded in establishing in the face of all the differences and contrasts of her people, peace and law should reign between the nations. To achieve this aim, Switzerland has done what she could by basing her relations with other countries on the state principle of *perpetual neutrality* inspired by a spirit of peace.

The principle of neutrality is deep-rooted in the very being of the Confederation. From the day when the Confederation was founded for the purpose of ensuring the survival of its members by a united defence against enemy attack, it was not in a position and was not called upon to use these united forces for aggression. After the defeat at Marignano in 1515 it decided to forego further foreign adventures. This was the price the Confederation had to pay to maintain her inner balance and to save herself from future dangers. Thus Switzerland was spared the horrors of the Thirty Years' War. Having achieved actual independence of the Empire by the Swabian War at the end of the 15th century, her independence was formally recognized by the Peace of West-

Neutrality a historical and legal status

phalia in 1648, on which occasion her self-imposed principle of neutrality, too, was recognized for the first time.

It was eminently in the interest of Europe that this principle should be respected, and that this country in the centre of Europe should not join in wars of conquest or struggles for power. In 1815 the Congress of Vienna and the Convention of Paris formally set down in writing that "the neutrality and inviolability of Switzerland, and her independence of any foreign influence, is in the true interests of European politics". The powers which signed the Convention of Paris were Austria, France, England, Russia and Prussia; Spain, Sweden and Portugal joined later. Since that time, Switzerland has been preserved from war. Nevertheless she did not rely only on the fact that her neutrality had now become a provision of international law, instead of having to be re-affirmed each time the necessity arose. In order to preserve that neutrality and safeguard herself from attack, she created a *military* force based on compulsory military service. There is no standing army in Switzerland and there are very few professional soldiers. But in time of war the Confederation elects a general who takes over the sole command and the responsibility for the army. That army consists of well-trained soldiers who are kept up to the mark by spending a few weeks every year in military training. The mountains offer excellent means of defence and every soldier is trained in mountain warfare. During the second World War, Switzerland had 800,000 citizens with the colours, either as soldiers or in the auxiliary services and the cost of maintaining the country in this state of preparation amounted to 10,000 million francs.

No power politics principle

Fundamental recognition of neutrality as the abiding principle of the Swiss state—recognition that in no way depended on the constellation or power politics of the moment—was accorded in the Declaration of London by the League of Nations (Feb. 13th, 1920), wherein it was stated that Switzerland had once and for all renounced power politics and the use of force, defence forces excepted. The Council acknowledged that "by reason of an old tradition handed down through the centuries which has been expressly recognized in international law, Switzerland is in a unique position, and the guarantee given by the Treaty of 1815, and more particularly the Declaration of November 20th 1815, represent an international agreement to maintain the peace." The Declaration concludes with the renewed assertion "that the perpetual neutrality of Switzerland and the guarantee of the inviolability of her territory are justified in the general interest of peace and are hence in keeping with the aims of the League of Nations."

Neutrality and international solidarity

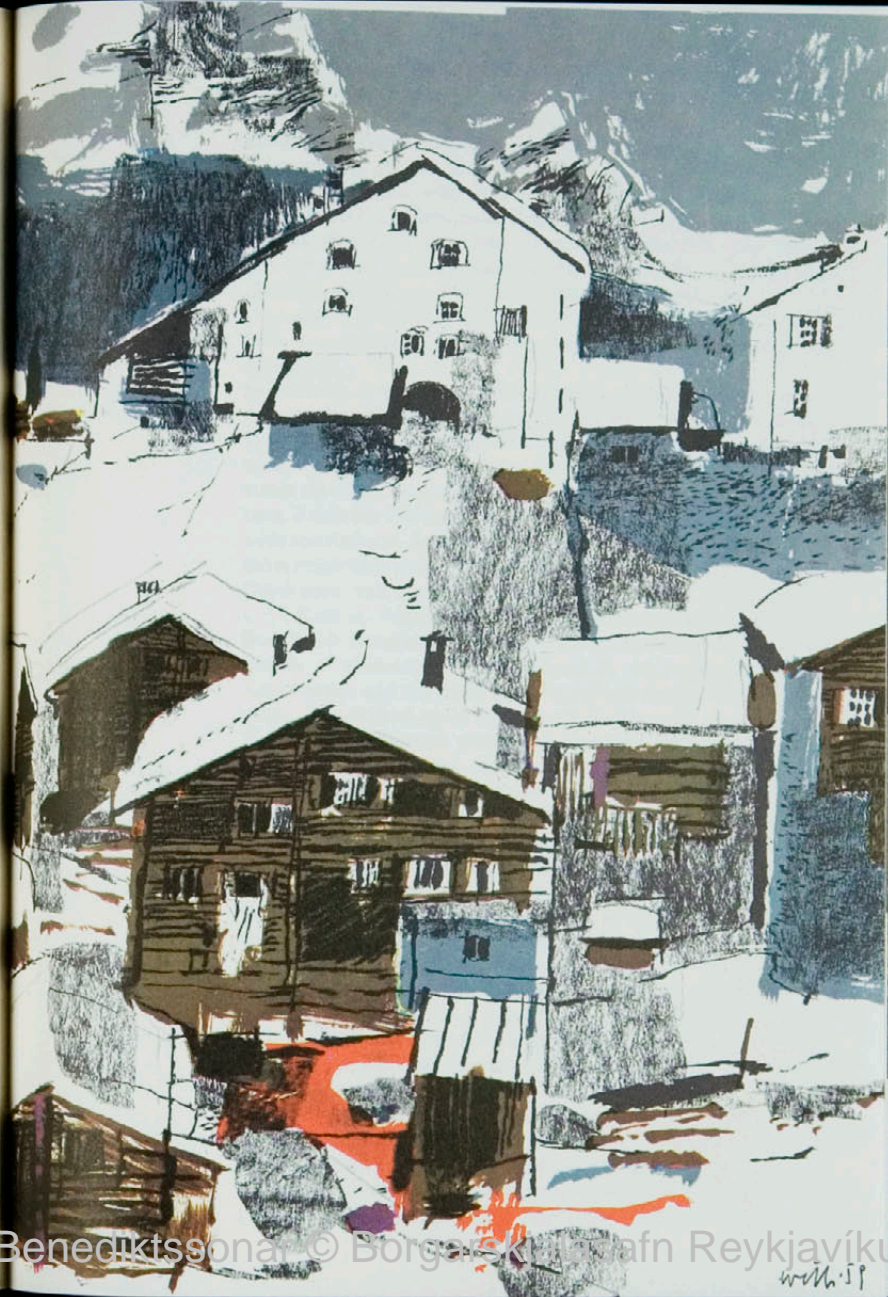
Swiss neutrality is not merely a negative thing, a policy of non-intervention in foreign conflicts. It is something quite positive.

That Switzerland, with her key position, should be a country of peace, is in itself a contribution to the cause of peace. But Switzerland has herself used her neutrality as the basis for many activities. In view of her policy of non-interference, she has in the course of time often been entrusted with international missions; for instance, Swiss citizens have been presidents of international courts of arbitration. Switzerland has also become the headquarters of a number of international institutions (Universal Postal Union, International Telecommunication Union, Central Office for International Transport by Rail, International Union for the Protection of Intellectual Property, League of Nations, 1919-1946, European Office of the United Nations Organization, International Labour Organization, World Health Organization, International Bureau of Education, etc.). The founding of the International Red Cross by Henri Dunant of Geneva, ratified by the Geneva Convention of 1864, represents the most important and at the same time the most permanent achievement of international solidarity. During the two wars, and even while the total war of 1939-1945 was raging, the Red Cross was a refuge for humanity; it maintained relations between enemy countries and kept up lines of communication over war areas, saving countless lives thereby. During that war the Confederation had some forty mandates for safeguarding the interests of belligerents in countries occupied by their enemies. Switzerland's neutrality is therefore anything but a denial of international solidarity. On the contrary, her position as a state founded on the principle of neutrality has always been considered by the Swiss as imposing upon them a *certain obligation of active international solidarity* and the pursuit of humanitarian aims.

The fusion of localism with world-wide connections is one of the main features of Switzerland and characterizes at the same time her economic and political position among the nations of the world. It is worth while noting that Switzerland has inspired a number of innovations in other countries; for instance the typically Swiss institutions of the referendum and initiative have served various states of the U.S.A. as models for similar institutions. Switzerland, on the other hand, had in 1848 taken from America the idea of the bicameral system for the representation of the people and the cantons. Tribute has been paid to Swiss legislation, too, as when Turkey, in building up her republic, took over and adapted to her needs the entire Swiss Civil Code. This, however, is only a part of the *cultural influence* which Switzerland has had on the world. There has always been an active exchange of ideas between her and the rest of the world in more than one sphere, and she has never failed to consider or assimilate new trends of thought, especially if they were in keeping with the Swiss character. The Reformation took a quite

Switzerland and world culture

Grisons



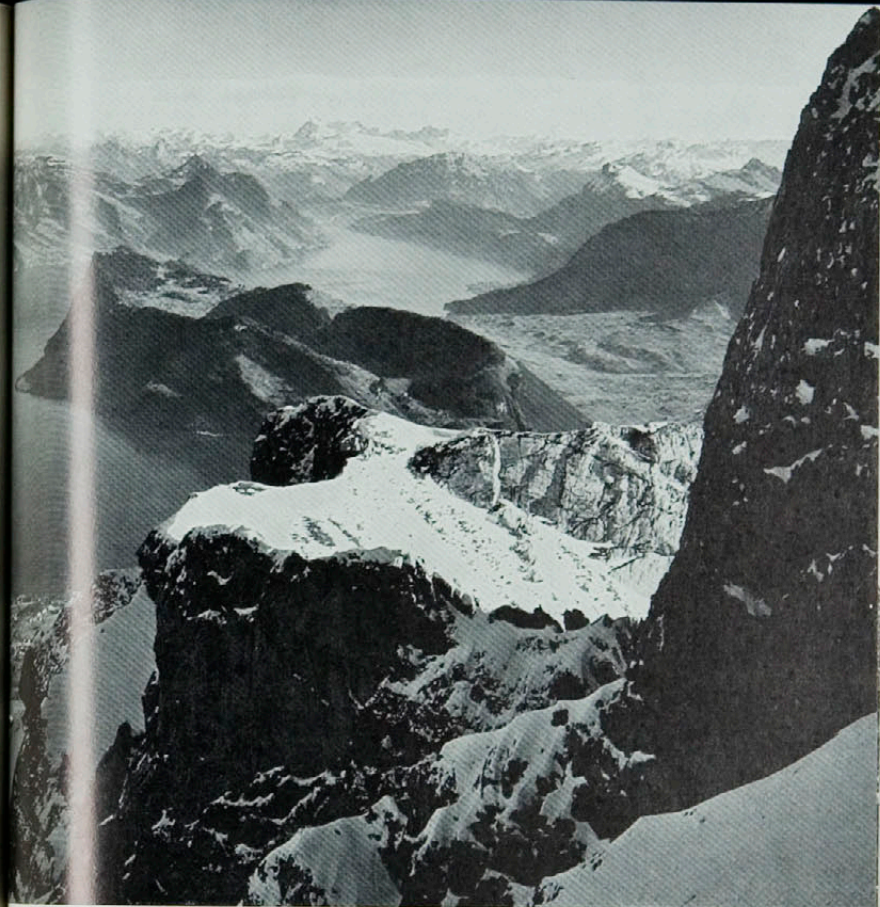
peculiar form in this country, and Calvin and Zwingli are two outstanding personalities whose influence extended far beyond the Swiss frontier. Calvin's Geneva had a decisive influence on Holland in her struggle for freedom; the city was even named "the mother of the Dutch nation". The name of Geneva is closely associated with that of Jean-Jacques Rousseau, of Madame de Staël and Benjamin Constant. The teaching of Rousseau, the watchmaker's son, has proved more durable than that of any other 18th-century philosopher. His younger contemporary, Heinrich Pestalozzi, born at Zurich in 1746, and, with him, the pedagogue Father Girard of Fribourg (1765-1850) won worldwide recognition for their ideas and achievements in popular education.

In the 19th century, four great masters of literature sprang from the German-speaking part of Switzerland: Jeremias Gotthelf, Gottfried Keller, Conrad Ferdinand Meyer and Carl Spitteler, winner of the Nobel Prize for Literature. Their works have become classics. Since the second World War, two Swiss dramatists, Friedrich Dürrenmatt and Max Frisch, have gained worldwide reputations. Among the French-speaking Swiss thinkers, the most important writers after Rousseau were Alexandre Vinet, the theologian and literary historian, and, more recently, the poet C. F. Ramuz. Again among the German-speaking authors we find Jacob Burckhardt, of Basle, the great historian, a contemporary of Nietzsche at Basle University where the philosopher Karl Jaspers and the theologian Karl Barth taught in more recent years. The Italian-speaking part of Switzerland, especially the Ticino, has produced prominent sculptors and architects who have their place in the history of Italian art, for instance the Solaris, the Fontanas, Antonio della Porta (Tamagnino) and Francesco Borromini. Many Swiss names of international standing are to be found in science, such as the Basle mathematicians Euler, and Bernoulli, and the famous physicist and Nobel prize-winner C.E. Guillaume, Director of the International Office of Weights and Measures in Paris. DDT is a product of the Basle chemical-pharmaceutical industry; its inventor, Dr. Müller, was awarded the Nobel Prize. Czar Alexander II of Russia used to say: "I am what I am thanks to a Swiss", thus paying homage to his tutor and friend César Laharpe. This reminds us of a number of Swiss who have attained high positions abroad, such as Ilg, the engineer, who was minister to Emperor Menelik of Abyssinia. Walter Munzinger of Olten explored the country on the Abyssinian frontier and was appointed Governor of Eastern Sudan where he did much to advance the spread of civilization. Johann Ludwig Burckhardt made a study of the little-known countries of Islam and was the first European to enter Mecca. One of the prominent explorers of Upper Egypt was Edouard Naville. Then

there are C.J. Bernard, who was director of the Ministry of Agriculture, Trade and Commerce in Batavia, Sir Arnold Theiler, who founded in the Transvaal the most important veterinary research institute in the world, and Carl Jacob Burckhardt, League of Nations High Commissioner for Danzig on the eve of the second World War.

These are but a few examples to give an idea of the manifold contributions Switzerland and prominent Swiss have made to the progress of civilization. Yet Switzerland's most important achievement lies in her body politic and the way she has harmonized the various great European cultures. She has not only bridged over the points of difference and contrast, but succeeded in welding them into a powerful and fruitful whole. The nations of Europe and of the whole world, bound together as they are ever more closely in a common fate by the realities of modern technology, have yet to attain in their mutual relations what was achieved a long time ago by the cantons of the Swiss Confederation. Switzerland, embodying as she does the idea of humanity and mutual tolerance, is by her mere existence the living contradiction of the theory of a hereditary enmity among mankind. She is the living proof that discord between the nations is not fate, but can be mastered by the free creative will of man. Switzerland with her way of life has thus become the symbol and hope for a future community of nations, as Victor Hugo declared prophetically when he said: "La Suisse dans l'histoire aura le dernier mot." This is what a Swiss statesman meant when he said: "In my eyes, the Rütli (where the original Confederation was founded in 1291) is not just a lonely field on which our ancestors gathered to seal their immemorial oath in the face of God. The Rütli is a human ideal of solidarity and justice, which is all the greater because it came from simple hearts and minds."

On the occasion of the centenary of the modern Federal State a member of the national government expressed this thought even more clearly: "It is interesting", he said, "to see that the trends apparent in contemporary Europe are the very same as those that led to the formation of the Confederation as it is today." Referring to the latest developments in the process of European integration, the President of the Swiss Confederation declared in 1961: "Whether we regard it as of our own doing or as an act of grace, the fact remains that the peaceful coexistence within our frontiers of people of the races and languages that go to make up a large part of Europe constitutes both a miracle and an example worthy of imitation. For us at least it must remain an ideal for the shape of things to come in Europe."



The Alpine foothills of Central Switzerland:
View from Mount Pilatus across the Lake of Lucerne



In the realm of eternal snow:
The Monte Rosa massif in the Valais, with
the highest peak in Switzerland, 15,200 ft;
on the right, the Lyskamm

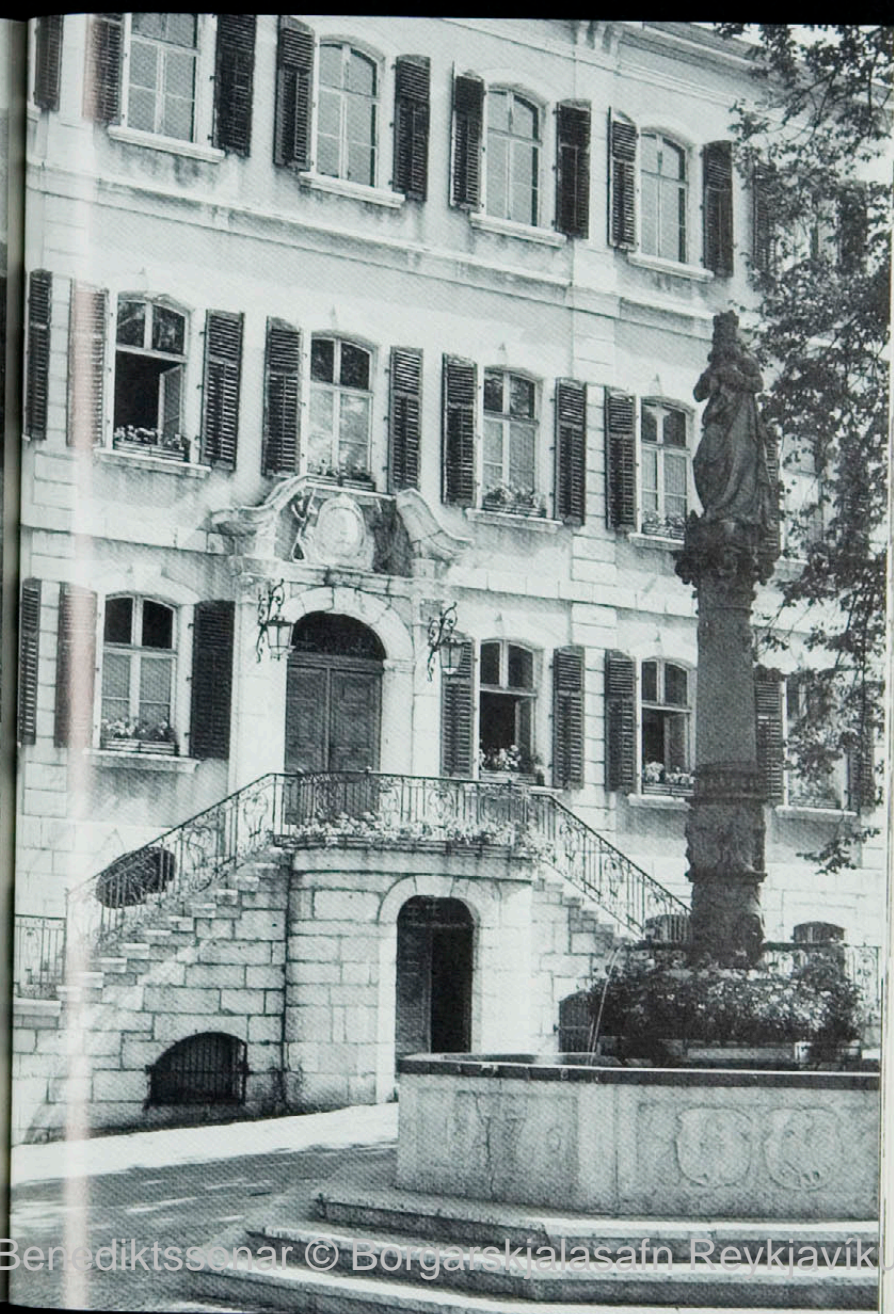


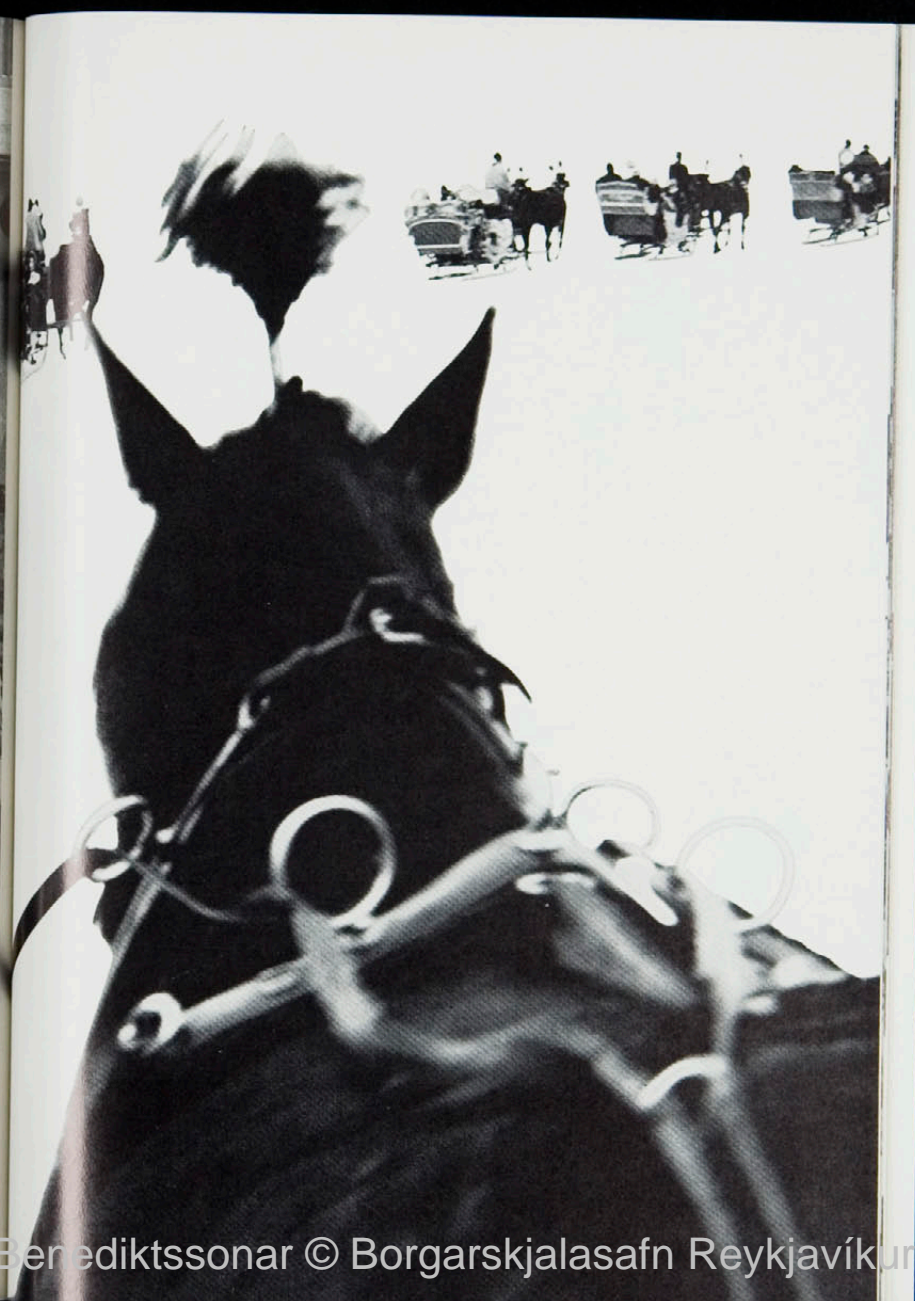
In the Ticino, south of the Alpine range:
Tegna in the Centovalli



Harvest in the Bernese countryside

The Town Hall and the decorative fountains in the streets and squares are characteristic features of almost every Swiss town: Delémont in the Bernese Jura





Skiing is easier than it looks—the climb
may call for more effort than the downrun,
but the fun lasts longer



Foregoing pages:

A Gothic cathedral on a hill; at its foot,
busy streets, smart shops—that's
Lausanne

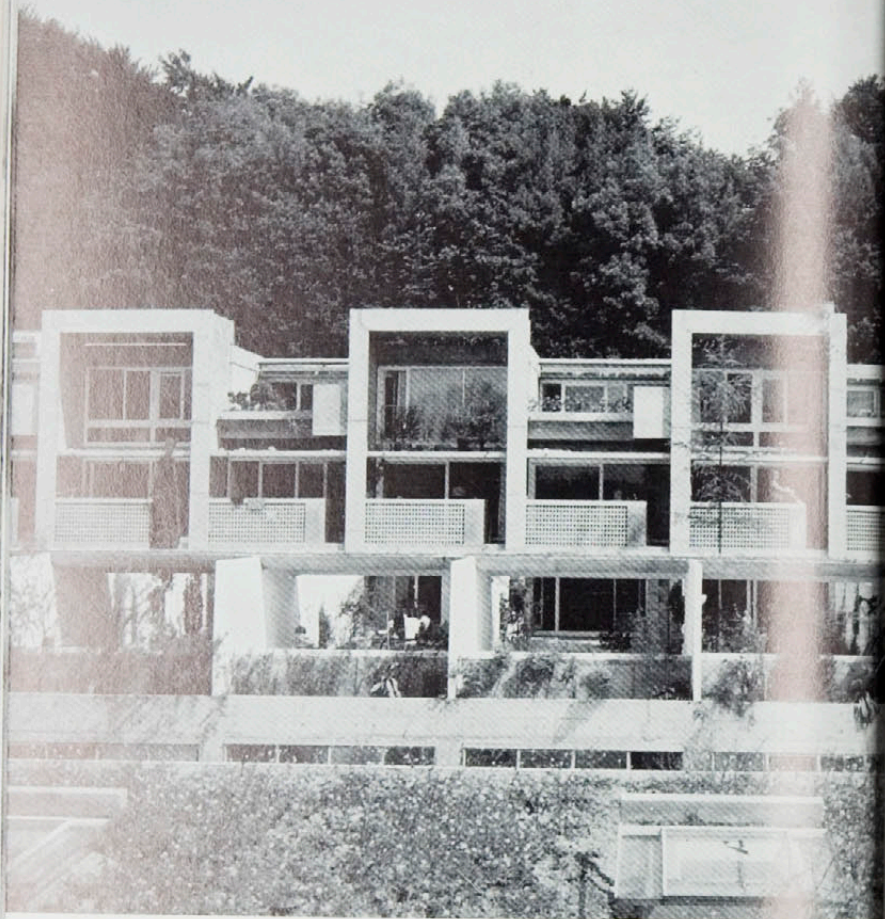
A sleigh-ride in the Grisons to the jingle of
bells—a heart-warming treat for
young and old



Even in kindergarten, at the age of five or six, the kiddies learn the joy and satisfaction of "doing it yourself"

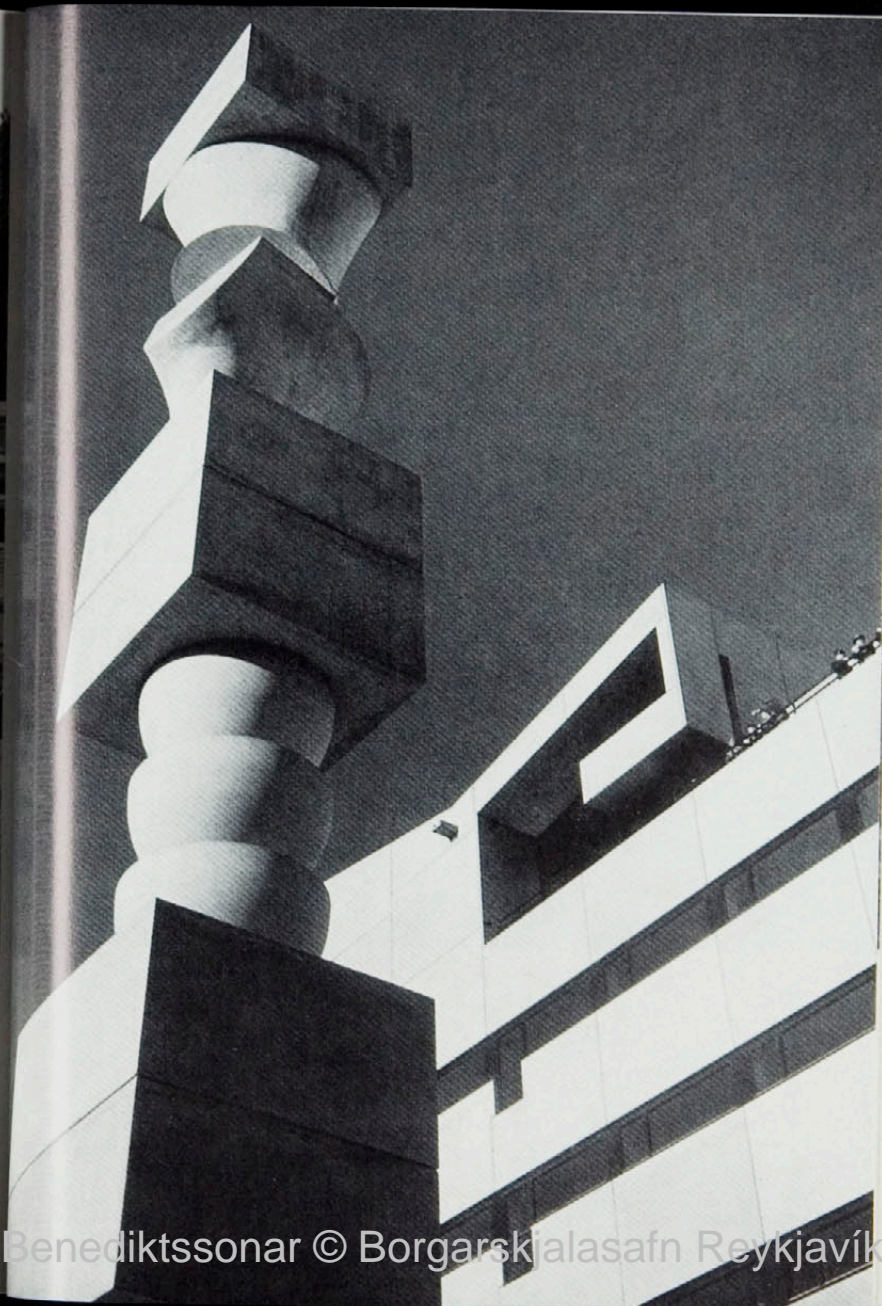
Swiss schools, both public and private, have a world-wide reputation for efficiency. The new Cantonal School in Zurich, designed by Jacques Schader





Modern Swiss homes in the new residential suburb of Halen, near Berne

"Eléments interchangeables", sculptured pillar by Hans Arp, in front of Basle Arts and Crafts School



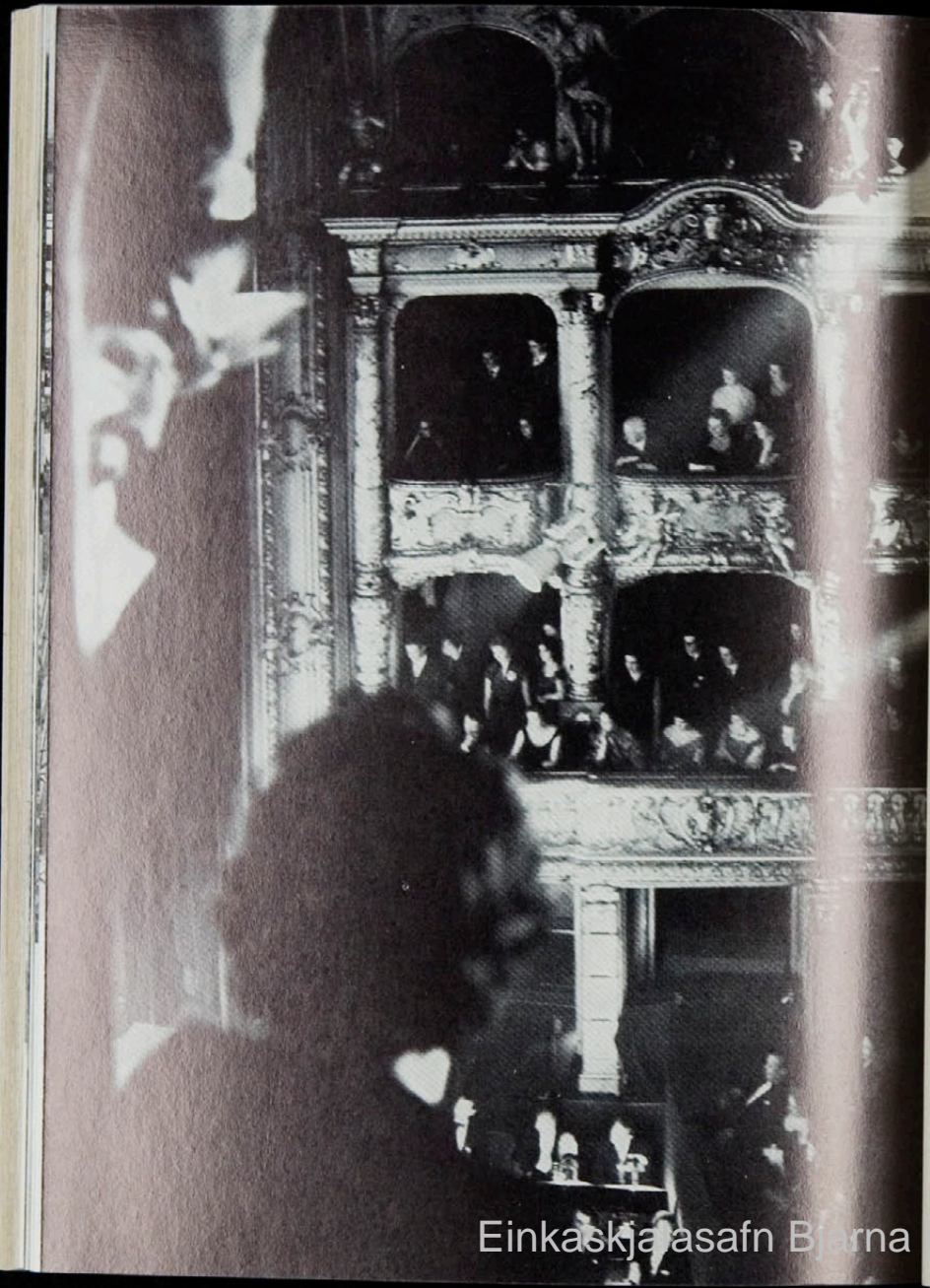


Two-fifths of Switzerland's imported raw materials and exported manufactured products is handled at Basle's inland port on the Rhine



Switzerland's busy airports provide direct links with every part of the world

Overleaf:
Concerts, operas, plays form the hub of cultural and social life in the Swiss cities and towns



Contents

Foreword	5
All about Switzerland	9
A Beautiful Country	9
A Poor Country	10
Liberty, the Staple Raw Material	12
The Nature of the Swiss State	15
The Swiss People	21
Town and Country	24
Switzerland as an Industrial Country	25
The Leading Industries of Switzerland	28
The Economic Importance of the Swiss Industries	31
A Peaceful Conquest	32
The Swiss Abroad	36
A People Rooted in the Soil	37
The Farmers	39
A Healthy People	41
An Educated People	43
Swiss Prosperity	45
Switzerland as a Tourist Centre	48
The Place of the Confederation in the Family of Nations	54

Translated by R. A. Langford
 Layout and illustrations: H. Wetli
 Photos: H. P. Baur, J. Chausse, P. Giegel SNT0, R. Gnant, E. Grob,
 F. Rausser, A. Winkler

The figures given in the text are based on the latest published statistics.

**Where to obtain information
on travel,
trade and industry
in Switzerland**

Travel

Switzerland:

Swiss National Tourist Office
Head Office: Zurich, Talacker 42

Abroad:

Swiss National Tourist Offices and
Official Agencies of the Swiss

Federal Railways in:
Amsterdam, Koningsplein 11
Brussels, 75, rue Royale
Buenos Aires, Avenida Santa Fé 854
Cairo, 22, Kasr el Nil Street
Copenhagen, Vesterbrogade 6D
Frankfurt o.M., Kaiserstrasse 23
London, 1 New Coventry Street
Madrid, av. José Antonio 84, 1º
Milan, Piazza Cavour 4
New York, 608 Fifth Avenue
Nice, 11, avenue Jean Médecin
Paris, 37, bd des Capucines
Rome, via Vittorio Veneto 36
San Francisco, 661 Market Street
Stockholm, Kungsgatan 36
Tel Aviv, 28 Achad Ha'am Street
Vienna, Kärntnerstrasse 20

Industry and Trade

Switzerland:

Swiss Office for the Development
of Trade
Zurich, Dreikönigsstrasse 8
Lausanne, Bellefontaine 18

Abroad:

Swiss Chambers of Commerce:
Brussels, 1, rue du Congrès
Buenos Aires, av. Leandro N. Alem 822
Milan, Via Palestro 2 / Piazza Cavour
Paris, 16, avenue de l'Opéra
Rio de Janeiro, Casa Postale 4358,
Rua Candido Mendes 157-2º
São Paulo, Case Postale 8259,
Rua Caio Prado 183
Vienna, Neuer Markt 4
Mixed Chambers of Commerce:
Amsterdam, Hobbemastraat 15
Chicago 3, 106 S. Michigan Ave.
Montevideo, Calle Cerrito 440-P 3º

All about Switzerland



Einkaskjalasafn Bjarna Benediktssonar © Borgarskjalasafn Reykjavíkur