THE SECOND FRONT OPENS DOODLEBUGS AND V2s PATRICIA IS BORN

THE LAKE DISTRICT MY PARENTS, ANNI, BORIS AND OTHER FAMILY MEMBERS DIE

THE RUSSIANS "LIBERATE" SLOVAKIA ANNI VICTORY DAY THE ATOM BOMB

1944 - 1945

Life at SMH continued with customary zeal. In January we presented our four study reports to a discussion meeting. We had talks by various experts on Churchill, Roosevelt, Stalin and Chiang Kai Shek and concerts by Antonia Butler (violincello) and Maria Karchinska (harp). At the AGM in April 1 was re-elected to the Students' Committee.

Fighting in Italy continued and was very tough, the Germans resisting fiercely and withdrawing northwards very slowly. Rome fell into the hands of the Allies on 4th June 1944. On the following day King Victor-Emmanuel abdicated.

On 6th June the great event happened which we had all been waiting for: the Second Front was opened by a massive attack in Normandy. There was much rejoicing and we followed through the BBC and the papers every detail of the advance which proceeded with breath-taking speed. The time of the landing was at Ol o'clock in the morning; by co-incidence the date and time was 6.6.01 the reverse of 1066, Britain's invasion from the Continent. But the war was far from won yet. Four days after the landing, the first "doodlebug" exploded with a terrific bang in London. I and thousands of other people heard it. Nobody knew what caused it. Some said a bomb had fallen on a gasholder and there were other rumours until a day or two later the newspapers carried headlines about this new weapon. The rockets came from launders across the Channel. They had rocket engines and were launched at a steep angle, flying high over the Channel. The RAF had been attacking the launching sites but as they were well concealed and in concrete bunkers these attacks were unsuccesful. It was also difficult to shoot them down over the Channel, though in time the RAF learned how to. Over Kent they came down gradually and for the last part of their trajectory they were flying only a few hundred feet up. Barrage balloons were no real hazard to them. As they continued to descend they turned sideways along a gentle U-path and when the rocket motor stopped they dropped down. I remember one Sunday morning going for a walk in

Regent's Park with a friend when we heard the now familiar roar of a doodle-bug approaching from the direction of Tottenham Court Road. It came straight towards us, flew quite low over the trees and then turned to the left in the direction of Baker Street and a few moments later it had hit the ground and we heard a terrific explosion.

It became clear now that one of the objectives of the Allied landing was to send a strong force up the French and Belgian coasts to destroy the rocket sites.

On 15th August the Allies landed in Provence in Southern France thus creating a pincer movement, both columns moving in the direction of Germany.

On 16th August Patricia was born. Because of her pregnancy Jean had left London and given up her job at the BBC. She and John had friends near Stratford-on-Avon and Patricia was born in a hospital set in a lovely garden outside Stratford. I visited Jean there and it was good to see her being looked after so well and to make the acquaintance of my little niece.

I think it was that summer that Sandy, Victor and I took a holiday in the Lake District. I hadn't been in the mountains since 1938 when I was in the Tatras and I yearned to climb some peaks again. We found accommodation on a farm at the top of Great Langdale, called Stool End Farm. The accommodation was simple but the farmer and his wife were friendly and fed us well. There was a splendid view of Pike of Sickle and Harrison Sickle and up the narrowing valley from where the footpath ascends to Scafell, though its peak was hidden from our view. We climbed all these and other peaks. We frequented the bar of the near-by hotel most evenings. It was a place where serious climbers congregated complete with their climbing kit of boots, ropes and axes. We listened with awe to their stories of how they clung to a sheer wall or negotiating the narrowest of ledges or pulled themselves up by their fingertips gripping crumbly rock. Mr. Bulmer, the manager, was a tall ruddy-faced strapping man speaking with the local accent who was also an auxiliary policeman. Closing hours were therefore not necessarily observed strictly. He was proud of the high class of the hotel and reminded us every evening that the price of a single room was "seventeen bob a day". Indeed it sounded very expensive to us. "Seventeen bob a day" remained a joke between the three of us for years.

In the second week two plump, pink-faced bus-conductresses from Mancyester stayed at the farm. At supper they sat silently, glum and on the verge of



142. Near Stool End Farm in the Lake district, summer 1944. From left: I, Sandy, Victor and Tasker



152. Father as I remember him. Photo taken before I emigrated. It was one of the family photos I had taken with me

tears. We enquired sympathetically about the cause of their sorrow. We were told that they had booked through a travel agency and had been under the impression that they were going to a jolly place like Blackpool. Their suitcases were packed with swim suits, beach-wear and evening dresses and they didn't like mountains anyway.

Also at the Arm were a honeymoon couple, the Taskers. He was achemical engineer with ICI and I met him afterwards at professional meetings. See exhibit 142.

Years later Joan, Laura, Mike, William and I spent another holiday in the Lake District and that was the second time I climbed Scafell and some of the other peaks.

Work at Bamag started to change. The plants which we had supplied to the ROFs were working and we had little to do with them except for maintenance, repairs and minor improvements. The company looked for other outlets in readiness for peace. Bamag was strong in plants for the oils and fats industry. Fortunately Mr. Manning had the foresight or luck to have brought to England all the necessary drawings and technical information. Messrs. Bregmann's and Abel's recollections also helped. Once again we had to transform German prototypes into British measurements and standards. I was now involved in the planning of whole projects and I studied all aspects of oils and fats technology. This is how I started in this industry. We also worked on other projects: grass driers, refuse incinerators and alcohol from natural sources. The latter technology was familiar to me from our agricultural distilleries on our farms.

I became deputy to Mr. Abel, the sales manager. I liked this type of work much better than drawing. Of all these projects only the oils and fats plants developed into big business. India alone planned to build more than 20 plants and it was at the end of 1944 or early in 1945 that I met.

Mr. Sohrab Mistry from Bombay. Since then we have remained friends.

I was in charge of all advertising and the production of technical sales literature. Writing these gave me pleasure and I became acquainted with printing and all espects of advertising. I met the editors of technical journals and that gave me a chance to have technical articles published.

My first article in a technical journal appeared already on September 11th, 1943, in the "Chemical age". It was called INTRODUCTION TO CHEMURGY. See exhibit 143. Chemurgy propagates the use of agricultural surpluses and wastes for industrial products. On November 13th and 20th 1943 "The Recorder", a now defunct city weekly carried articles of mine FARMER AND SCIENTIST WORK AGAINST WASTE and POTATOES WILL MAKE SYNTHETIC RUBBER respectively.

and 145.

See exhibits 14%. On January 28th, 1944 I gave my first public technical lecture to the Graduates and Students Section - of which I was a member - of the Institution of Chemical Engineers on THE CHEMICAL ENGINEERING ASPECTS OF CHEMURGY. It was my farming background and the experience in our alcohol distilleries that had started my interest in the use of farm products for industry. It came natural to me to work in oils and fats for industry. Trist paper on oils and fats appeared in "Chemical Age" on June 24th, 1944 entitled MODERN TRENDS IN FAT-SPLITTING. There was no honorarium for technical papers but through them editors sent me books on the subject for reviewing. One retains the books and over the years I built up my library of technical books to some 50 volumes thus saving a considerable amount of money. See exhibits 14% and 14%.

The war was closing in on Germany. The Russians took Bucharest on 1st September and on the 6th September 1944 the Allies took Brussels. DeGaulle formed his first Government in Paris. London moved, however, into the frontline when the V2 rockets started to come over. They were much larger than the doodlebugs with a more lethal warhead and travelled at a much steeper trajectory and considerably faster. One could not see them and there was no familiar drone as with the doodlebugs. As the saying then was: "You either heard the bang or you didn't". As there were no more air raids by the Luftwaffe, the blackout was lifted. There was no defence against the V2 other than bombing their launching pads or, as ultimately happened, the occupation by the Allies of the launching pads. The devastation wreaked by a V2 was several times that of a doodlebug. They didn't stop coming until the whole Western coast of the Continent was liberated.

SMH was in a state of excitement. The French, the Belgians and the Dutch were preparing to go home. The programme of events was as good as ever.

James Agate, the author and dramatic critic of the "Sunday Times" and Arthur Koestler gave talks.

Britain's first major opera for many years had its première in Covent Garden on June 7th, 1945, after the end of the war in Europe but its preparation was common knwledge long before. We were particularly pleased when on 26th November 1944 Peter Pears and Benjamin Britten gave us a concert.

Victory was in the air but the cost was terrifying and nauseating. The general carnage and the bombing of German cities was horrifying. The news

## Introduction to Chemurgy

#### A Growing Industry Based on Plant Products

by M. K. SCHWITZER

THE intensive development of agriculture in this and other countries has drawn the attention of scientists and economists to two major problems. One is the maintenance of soil fertility, and the other the economic disposal of regional and seasonal surpluses of farm crops. To keep the soil fertile all ingredients taken from the soil must be returned. Fertilisers and crop rotation help to achieve this, but that is not sufficient. In many parts of the Continent it has been usual to combine large farms with distilleries and to spread sugar factories over the beet-growing Potatoes, cereals and sugar beet were transformed into alcohol or sugar respectively. The slop, pulp and molasses were used to fatten cattle and to feed the dairy herds, the animal manure being returned to the soil, thus completing the highly desirable closed circuit. In principle, this method could be called "chemurgic" farming It had not only the advantage of producing bread, meat, milk, sugar and alcohol most economically, but it also contributed effectively towards keeping the soil

#### Surpluses

A feeling amongst farming populations all over the world that the present boom in their products might turn into a slump, as soon as the vast relief programme outlined at Hot Springs has murgists regard the products of agriculture as raw materials vital to industry. Surpluses of certain crops at certain periods and in certain districts are unavoidable, but all such surpluses could be usefully absorbed by industry. During the period of restrictive economy between the last two wars, many sur-pluses were destroyed. This meant waste of all the production costs, but more than that, the products were thereby rendered more expensive, the consumer ultimately paying for the waste. creating a continuous industrial demand for agricultural products, science and chemical engineering will not only help

to maintain the price of food at a low level, but also render their greatest contribution to agricultural practice and to farmers' security. Once the principles of chemurgy are fully understood and adopted, even the vastest "food-for-all" programme will appear insignificant when compared with the great potential capacity of an industry that utilises farm crops as its raw materials.

Many chemurgic principles have already found practical application for many years. The significance of this, however, was only fully realised during the last great slump when in the U.S.A. large quantities of surplus crops impoverished whole districts and turned a large part of the farming population into a desolate mass deprived of any purchasing power, while at the same time "economists" were considering it inevitable that in the Far Fast more than a million people should be dying from hunger each year.

#### Birth of the New Science

The word "Chemurgy" was coined in 1934 by Dr. William J. Hale, research consultant of the Dow Chemical Company of America, in his book "Farm Chemurgic." It is derived from the Greek "ergon," which means work, and "Chemi" or "Khem," which was the name given to Ancient Egypt by neighbouring nations, derived from Egypt's hieroglyphic name "Qemi," meaning dark soil or black land. As far back as 3000 B.C. the Egyptians were chemical technologists and thus chemistry became the name for the "art of the black country." Hence, Chemurgy might best be translated as "chemistry at work" and its function is to discover new ways and means of using farm crops as raw materials for producing goods other than food and clothing.

A practical beginning was made in May, 1935, when 300 manufacturers, scientists and farmers met in Dearborn, Mich., U.S.A., to discuss how vast rural areas could be revitalised by new chemurgic industries and how to deal with food surpluses and wood waste.

143. My first article in a technical journal

# FARMER AND SCIENTIST WORK AGAINST WASTE

## HOW SURPLUS CROPS CAN BE USED IN MODERN INDUSTRY

BY M. K. SCHWITZER

THE intensive development of agriculture in this and other countries has drawn the attention of scientists and economists to two major problems. One is the maintenance of soil fertility, and the other the economic disposal of regional and seasonal surpluses of farm crops. To keep the soil fertile all ingredients taken from the soil must be returned. Fertilisers and crop rotation help to achieve this, but that is not sufficient.

In many parts of the Continent it has been usual to combine large farms with distilleries and to spread sugar factories over the beet-growing districts. Potatoes, cereals and sugar beet were transformed into alcohol or sugar respectively. The slop, pulp and molasses were used to fatten cattle and to feed the dairy herds, the animal manure being returned to the soil, thus completing the highly desirable closed circuit.

In principle, this method could be called "chemurgic" farming. It had not only the advantage of producing bread, meat, milk, sugar and alcohol most economically but it also contributed effectively towards keeping the soil fertile.

#### SURPLUSES

A feeling amongst farming populations all over the world that the present boom in their products might turn into a slump, as soon as the vast relief programme outlined at Hot Springs has been completed, is unjustified. Chemurgists regard the products of agriculture as raw materials vital to industry. Surpluses of certain crops at certain periods and in certain districts are unavoidable, but all such surpluses could be usefully absorbed by industry.

During the period of restric-

tive economy between the last two wars, many surpluses were destroyed. This meant waste of all the production costs, but more than that, the products were thereby rendered more expensive, the consumer ultimately paying for the waste.

were thereby rendered more expensive, the consumer ultimately paying for the waste.

By creating a continuous industrial demand for agricultural products, science and chemical engineering will not only help to maintain the price of food at a low level, but also render their greatest contribution to agricultural practice and to farmers' security. Once the principles of chemurgy are fully understood and adopted, even

Last week, in its leading article, THE RECORDER wrote of the War Against Waste and showed—with special reference to coal—how surpluses and byproducts could be used in modern industry. This week, a brilliant research chemist on the staff of a British firm introduces "Chemurgy" and gives a glimpse of industry's future partnership with agriculture. Chemurgy is not altogether new; but it is a science which has made rapid progress since the war. The Ford Motor Company's researches into plastics from soya bean and China's use of synthetic petrol "cracked" from the nut of the Tung tree are among the better-known examples of the practical achievements of the new science.

As Mr. Schwitzer points out, once Chemurgy is properly applied, a new vista of prosperity is opened for the farmer and the problem of surplus crops becomes a thing of the past. "Chemurgy," he says, "can lead to unlimited wealth for mankind,"

To-day, there are no less than thirty regional chemurgic councils' in the U.S.A., and the National Farm Chemurgic Council comprises more than 150 corporations (each of which contributes \$2,500 annually), and 1,600 individual members. Annual meetings are held in different towns, and the topics discussed vary from breeding hybrid poplars capable of an annual growth of twelve feet in height and 1½in. in diameter, to commercial food dehydration plants, and from non-crystallising corn syrup to the "farm-grown" motor car.

Attention was drawn to the potentialities of chemurgy in England, particularly by the Moncure Conway Memorial lecture of Professor Hogben entitled "The Retreat from Reason," and the 1937 William Mather lecture by Sir Harold Hartley, while in Canada the Dominion Chemurgic Association was founded in 1939 to assist farmers and industrialists in all chemurgic problems. In recent years chemurgy has developed with vigorous strides. Many scientists hold that this new branch of science may yet have big surprises in store.

## POTATOES WILL MAKE SYNTHETIC RUBBER

### HOW CHEMURGY CAN USE UP AGRICULTURAL SURPLUSES

By M. K. SCHWITZER

In his article last week, Mr. M. K. Schwitzer told the history of Chemurgy, the science of chemistry at work." He now gives some practical appli-tations of Chemurgy, and Jore-casts its part in the new industrial economy of the world.

DURING the last war the Weizman fermentation process provided the vital raw material, acetone, for the explosive industry; the by-product, butyl alcohol, then had only limited application in industry. Recently, further attention has been grawn to this process. Butyl alcohol is obtained by anaerobic fermentation starch-containing matter; 100lb. of maize, for instance, yield approximately 16th. of butyl aiconol besides such valuable by-products as acetone, ethyl aiconol, hydrogen, carbon dioxide, and a cattle food rich in proteins and vitamin B. The butyl alcohol can then be de-nyorated over activated alumina, yielding n-butene. A part of the latter can be converted into iso-butene, which is polymerised with the remainder of n-butene to iso-octene. The hydrogenation of iso-octene gives iso-octanes.

#### HIGH PERFORMANCE

The great importance of high performance aviation spirit proauced from farm crops is therefore evident. Especially those countries, such as Canada, South Africa, Brazil, and Czechoslovakia, with a developed agricul-ture but practically no mineral oil, would greatly benefit from home-produced chemurgic high-

octane motor fuel.

The use of alcohol as motor fuel has only just started in many countries. It has rapidly increased during the war, and nobody can foretell the speed and extent of its growth. The fractions of mineral oil and natural gas from which C3 and C4 compounds are now produced are limited. The demand for such compounds is ever increasing and it might be expected that supplementation of this range by butyl alcohol derivatives will gain importance.

#### SYNTHETIC RUBBER

More recently the great demand for plastics and synthetic of use for both ethyl and butyl alcohol. When in 1939 Prof. Hale's Forward March became a best seller in America.

was negligible. The 10 million acres planted in 1942 represented an increase of 83 per cent. over 1941, and produced a record yield of 210 million busness. The soya bean contains twice the protein or meat, twice the calcium of milk, and more than twice the mineral content of wheat, and is a pertect natural tood. Its complex oil and protein content can provide inexnaustible uses for industry; it can be pressed into a plastic and spun into cloth; cracked like petroleum for paints and varnisnes; and remed for edible oil and soap. The pre-war research work carried out by the Ford Motor Company, which developed a plastic from soya beans as a basic material suitable for the production of motor car bodies, is well known.

#### SIGNIFICANT

Mr. H. Ickes, U.S. Petrol and Solid Fuels Co-ordinator, revealed recently "that in meeting the declining number of petrol deposits discovered in-recent years, synthetic rubber and plastics industries will have to look somewhere else for raw materials," while Lord Cher-well stated in the House at the end of July that "the survey of our coal resources now proceeding will enable us to judge how soon our scientists will have to discover another form of energy," and he invited sound proposals for industrial research extension of that topic. While mineral oils and coal are exhaustible, farm crops will exist as long as man assists nature. It is the most import-ant task of chemurgy to preserve our inherited mineral wealth by enabling us to use that wealth sparingly by substituting for it crops that are renewable each year.

Much has already been achieved, yet we are still only at the beginning of our experience in soil fertilisation, cultivation of crops, and breeding of animals and plants. Promis-ing results have been achieved by artificial insemination. Ver-nalisation of winter cereals has reduced the period between sowing and harvesting from 9 months to 60 days, thus opening vast semi-arctic districts to cultivation. The adaptation of all such methods points to the unlimited potentialities of soil productivity. While the current productivity. While the average world wheat yield is about 14 bushels per acre, 60 to 70 bushels uced to the U.S.A. in 1804. Up to the middle 1930's

bushels per acre, 60 to 70 bushels of wheat per acre have been harvested in many parts of England in the present 1943 harvest.

HYDROPONICS

One day even hydro-ponics (soilless culture) might be usefully employed for growing food or industrial crops on a large scale. This would certainly be a welcome innovation tainly be a welcome innovation to countries with small arable acreage like Norway, or with large populations like England, or wherever adverse natural conditions prevail as in semi-arctic districts. There is scarcely a day without news of new developments in these directions. Their practical applications after the war might be overwhelming. Industrial biology is in its infancy and promises to open the door to surprising wealth. Great successes have already been achieved by the activated sludge process which provides for the conversion of the sewage. for the conversion of the sewage sludge of big towns into a valuable fertiliser.

The more the farmer improves The more the farmer improves the quality of his crops and steps up their yield, the more does he profit from agricultural industries, and the better balanced becomes the national and world economy. The incidental move of an important part of industry into hitherto purely farming districts will also intrinsically contribute to the intrinsically contribute to the solution of the problems of location of industry.

MANKIND'S DREAM

The dream of mankind to use solar energy, air and soil most efficiently for production of food, clothing and industrial materials is thus coming nearer to realisation. Coal and oil, which for a long time were the basis of our chemical industry, are giving way, to an increasing extent, to chemurgic industry. Instead of using up the stored energy from fossil flora and fauna in coal and oil, we take a short cut and produce in-dustrial materials from annually replaceable crops.

We thereby save our capital resources, being able to use coal and oil with more care and less waste, and only for purposes where they cannot be replaced by other materials. We can, therefore, live on recurrent revenue without drawing on capital. Close control of plant crowth will each leave to multiply growth will enable us to multiply the variety of crops and im-prove their quality and quantity. Except for their mineral content of 2-3 per cent., plants depend on moist air and sunshine, of which there are unlimited stores. Hence chemurgy can lead to un-limited wealth for mankind.

145. Continuation of article in THE

> RECORDER of November 20th

1943

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At a meeting of the Graduates and Students Section held at Caxton Hall, Westminster, on January 28, 1944, Mr. M. K. Schwitzer presented a paper on "The Chemical Engineering Aspect of Chemurgy."

. Mr. Schwitzer said that the word "Chemurgy" was coined in 1934 in the U.S.A. Chemurgic principles, however, were applied long before in many parts of the world. But it was then that for the first time farmers, scientists, and manufacturers met to discuss their common problems in the utilization of agricultural products for industrial purposes. The production of soap and glycerine is one of the oldest examples. Ethyl alcohol production from potatoes, molasses, and other carbohydrate containing matter is also an old-established industry. But it gained a new importance with the introduction of alcohol dehydration on a large scale as an inexhaustible supply of motor fuel in many countries. With the advent of an alcohol based Buna industry, ethyl alcohol became tonnage wise number one in the entire organic chemical field.

Butanol, acetone, and charcoal are a few more examples of important chemicals which belong to the domain of chemurgy. The expanding plastics, varnish, and allied industries consume ever-increasing quantities of chemurgic raw materials, such as

casein, vegetable oils, soybeans, etc.

Since chemurgy uses renewable crops we can to a large extent afford to live on recurrent revenue (providing the soil is kept fertile) and do not need to draw on our dwindling capital, namely, coal and oil, except in cases where there is no alternative. Instead of using fossil flora and fauna, we can use economically our present crops as raw materials for many a process, saving thereby our precious capital to a considerable degree.

140. Report on my first technical lecture in CHEMISTRY AND INDUSTRY, March 4th 1944 page 94

## Modern Trends in Fat-Splitting

#### Development of Continuous Processes

by M. K. SCHWITZER

RATS and oils as encountered in nature are esters of glycerine and the fatty acids. The resolution of the glycerides into their components is one of the oldest branches of chemical technology and is known as "fat-splitting" or "saponification." Chemically, fat-splitting is the hydrolysis of an ester of the pattern:

Evidence supports the first type of reaction1.

Until about 1932 it was generally held that aqueous hydrolysis of fats by caustic alkali solutions of water alone was a heterogeneous or two-phase process, that action took place exclusively at the oil-water interface, and that therefore it proceeded the more rapidly the greater the degree of dispersion of the fat globules throughout the aqueous phase. In 1932, Lester Smith demonstrated that in the saponification of oils with alkali, hydrolysis suddenly increases at a certain point, but remains substantially constant and relatively rapid until the process is approaching completion. This sudden increase in rate (with coconut oil at ordinary temperatures the acceleration is two-hundredfold) is due to the change from the initial sluggish saponification in the interfacial phase to the rapid reaction in the homogeneous solution. It is therefore, highly desirable that saponification should take place in one phase. This is in accordance with the theory that all hydrolytic reactions are homogeneous, proceeding in a single phase and not at the interface.

The older view, therefore, that a high degree of emulsification is required to increase the velocity of reaction, is to-day superseded by the desirability for making hydrolysis a one-phase process. At room temperature and atmospheric pressure neutral fats and oils dissolve only about 0.1 per cent. water. At higher temperatures solubility increases rapidly, and from Fig. 1 it will be seen that at 470° F., for instance, a fat of the tallow type will dissolve approx. 11 per cent. water and a fat of the coconut type approx. 23 per cent. water.<sup>2</sup> It is therefore understandable that when a homogeneous solution is required, high temperatures, and corresponding pressures to keep the water liquid, are desirable.

Hydrolysis is a simultaneous reaction of the reversible type. Two reactions proceed at the same time in opposite directions, each at its own specific rate. The net velocity of reaction is given by the difference of the velocities of forward and reverse reactions. Eventually a state of equilibrium is attained, Hydrolysis is therefore

not carried to completion, but leaves a certain proportion of neutral oil. It has already been stated that high temperatures are desirable for fat-splitting in the homogeneous phase. How does the high temperature effect the rate of reaction and the equilibrium point? A study of the van't Hoff equation

 $\frac{d \ln k}{dt} = \frac{\triangle H}{RT^2}$ 

for the change of the equilibrium constant shows that if hydrolytic reactions are accompanied by an evolution of heat, they will proceed farther at lower temperatures. In this equation k is the equilibrium constant,  $\triangle H$  is the heat absorbed, T absolute temperature, and R the gas-law constant. Since saponification is a

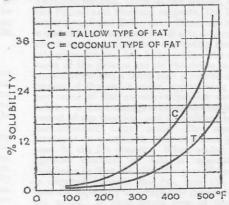


Fig. 1. Graphs showing solubility of water in fats at various temperatures.

slightly exothermic process, the equilibrium point will be affected adversely with rising temperature, and will shift towards a lower yield of glycerine.

On the other hand, the rate of homogeneous reactions increases rapidly with rising temperature. Generally for homogeneous reactions the rate increases two or three times for a 10° C. rise. The relative effect of an increase of temperature diminishes as the temperature is raised. In commercial processes the necessity of completing the operation in minimum time led to the use of the highest temperatures practicable in order to take advantage of the greater speed of reaction, regardless of a possibly unfavourable shift of the equilibrium point. It was thus possible to cut the operation time from 12-8 hours down to 2-½ minutes—about a thousandfold increase of reaction rate!

Catalysts are also used to increase the reaction

the glycerine. The residual lime soap is said to contain 0 t per cent, glycerol, while sweet

autoclave in copper or stainless steel, either

of Jews and others being sent in larger and larger numbers to the gas chambers drove me to the edge of endurance. I needed all my strength to get through these months. But how much greater was the suffering and horror of soldiers, airmen and sailors and of the German population under constant bombardment than mine. Worse even than that was the possible fate of my parents and Anni. They were trapped, and God knew what humiliations and tortures they were suffering. We had no news from them since a Red Cross message of 20th August 1944 which reached us on or about 5th October 1944.

It came from Hlohovec which was a bad omen. Mother and Erno lived in Podzámska 3 near Anni. See exhibit 149.

From various letters and notes which I got from Pali after the war I pieced together more or less accurately the evnts which led to the annihilation of my family.

At the end of 1943 things were still more or less "normal" and bearable. Anni managed at long last to visit Mother in Budapest for 10 days. Father was working less, as the administrator was in full charge of the farms and only managed to have sufficient to live on. He was unable to give any money to Mother. Mother continued learning English and attended University lectures. In November 1943 Boris managed to get a travel permit and visited Grandfather, Anni and Pali and also saw father.

Christmas was a relatively happy occasion. Both Anni and Pali came to Budapest and father was there for Christmas too. Pali returned to Hlohovec on 4th January 1944 as he was miraculously still working. Anni stayed on and returned to Hlohovec on 15th January 1944. Father had come partly to discuss financial matters with Mother. Mother wrote that he looks well though has put on weight. She is very pessimistic about ever getting any money again from Pather. She made one of her very rare comments about Father: "He is still the old dreamer, whose fantasies have mostly the one basic shortcoming that they remain fantasies". This in a letter of February 1944. As the German armies retreated on the Russian front Hitler's henchmen occupied Hungary and that meant the introdcution of the Nuremberg laws. Horthy managed to stay on for a while and in October 1944 wanted to conclude and armistice with the Allies. He was, however, discovered, imprisoned and later exiled to Fortugal. By May 1944 Christians of "Jewish" origin were rounded up. There is a card dated 12th May 1944 written by Boris in pencil to Mother in which she says that they are packing and that she can't stop crying. See exhibit 170. Here is a translation: "We bid farewell to our home on the 84th birthday of Father's. Gyuri was home to say good-bye, left at dawn today not having a home any longer.

Your letter arrived today as we are packing, I read it crying. I feel this was my last birthday. we are waiting for the inventory takers who will seal off all our belongings. I can no longer send parcels to Gyuri, write him to Jołsva immediately; ask him to let you know where he is, send him whatever you can. Indeed if necessary give him a home for us. I entrust him to you, as we have lost everything. God save you all and pray for us. I'll send news if I can.

Kiss you totally, exhausted and feverish, Boris"

Six days later on 18th May 1944 Boris managed to smuggle out a letter from the camp. See exhibit 15D It is a document of extreme human suffering.

I am translating it below:

" Dear Alice and Erno,

Dr. Hajdu Bela, Vertanu Street - comes in daily to see the patients. -We don't ask for parcels for the time being - just news from the whole family. Food we still have, namely what we have brought with us for two weeks. We are out here since Saturday, on Monday I could still go in (to town) to bring some alkali, fuel and a few potatoes. Drinking water we have from a well of the City Board. We alternate carrying the water. - we are surrounded by barbed wire. Police are watching us. Advisers, doctors, pharmacists are visiting us but none of us is allowed into the town's only shop, pharmacy or tobacconist. Bread is brought out to us by the local religious office (jewish) against our ration tickets. From 7 o'clock we work, unwashed, until late afternoon. Today for instance two bedbugs were in the kitchen where 4 men sleep on wooden bunk beds and so all day - Ascension Thursday !- we scrubbed with terpentine, washed clothes and dusted. So far we have no permission to go to church. We are 28 Catholics and 10 - 15 protestants. -Pista works all day with Duschnitz Berti in the woodshed and in the WC and they make shelves and coathangers in the house. Today we have barley soup and paprika potatoes for lunch. Pista looks unrecognisably thin. Do not mention this to Aunt Nella. I feel like a down-at-heel servant all day with a floor cloth and doing the heaviest chores. There is no time for bitterness! I am missing terribly Mass and Benediction. If the Good Lord gives us health and there is no out-break of an epidemic, then perhaps we can hold out. - Since Gyuri left we had no news from him, but someone came from there (Jolsva) who told us that our child is working as a doctor virtually single-handed amongst 2000 persons who have recently arrived there. He is thus working permanently. Until he or we write - don't send him any parcels.

How is Erno? What is going to happen in Nyul Street? It is going to be terrible for them to move out. I hope that you are going to stay put?

Hlavný stan Bratislava.



Croix-Rouge Slovaque Slowakisches Rotes Kreuz Bratislava.

## **COMITÉ INTERNATIONAL DE LA CROIX-ROUGE**

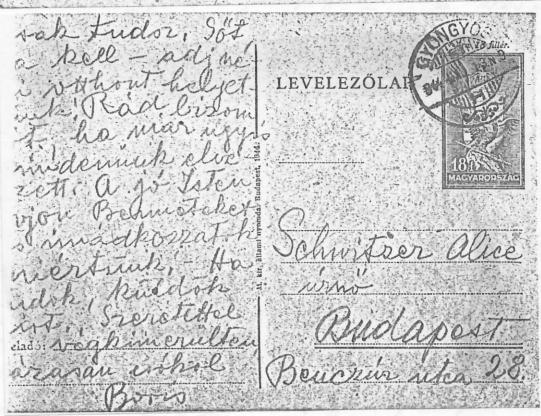
Palais du Conseil Général GENÈVE (Suisse)

Demandeur — O zprávu žiada — Anfragesteller

Prénom - Meno - Vorname ALICE
Nom - Priezvisko - Name SCHWITZER
Rue - Ulica - Strasse PODZAMSKA 3.
Localité - Miesto - Ortschaft HLOHOVEC
Province - Okres - Kreis
Pays - Štát - Land SLOVENSKO.
Message à transmettre - () sebe oznamuje - Mitteilung
25 mots au maximum, nouvelles de caractère strictement personnel et familial.  Pisat len do 25 slov, zprávy prísne osobné a rodinné.  Nicht über 25 Worte, nur persönliche Familiennachrichten.  LIVING WITH UNCLE NEAR ANNY'S, VERY HAPPY TO BE
TOGETHERWE ALL WELL, HEALTHY, HOPEFULL
THINKING ALWAYS ON YOU AND SUSAN IS BABY BORN?
ARE THEY HEALTHY?- KISSES MALLICS.
Date - Dátum - Datum HLOHOVEC. 20.VIII.1944.
Destinataire — Komu zprávu doručit — Empfänge
Prénom - Meno - Vorname Mathias
Nom - Priezvisko - Name SCHWITZER
Lieu et date de naissance - Miesto a dátum narodenia - Geburtsort u. Datum WIEN.12.FEBR.1917.
Fils de - Syn oten - Sohn des Stefan et de - a matky - und der ALICE.
Dernière adresse connue - Posledná známa adresa - Letztbekannte Adresse:
Rue Ulica- Strasse 29 CHARING CROSS ROAD. ALHAMBRA HOUSE.
Province - Okres - Provinz LONDON .  Pays - Stát - Land ENGLAND .
RÉPONSE AU VERSO. Odpovedajte na druhej strane. ANTWORT UMSEITIG.  Ecrire très lisiblement! Piste čitatelne! Bitte deutlich schreiben!
NB-5793 - 5. OCT. 1944

14%. Last message from Mother. She and Erno had fled to Hlohovec from Budapest. Shortly after this mesage she, Anni, Pali and Erno went into hiding in a bunker.

Liber mind and the following of the state of



149. Card from Boris to Mother, dated 12th May 1944 as they were packing to leave their home. Translation on pages 314/5

Kedves Alice es Erno! V.18-an Dr Hajdu Bela, Vertami M. - napouta bejar rendelini. - Comagot eggenløre nen korunk, - compan hirt ar egen coaladroe Emiralouk meg van ar, amit 2 hetre ki hostinek. Szorielat ota vagnuk kint, het for nieg bemeketen ligzot, tuzelot es en kis burgonyat kilomi. Tvorrzunk van a varon visteretek en kutjabel \*Felvaltva hordjuk a viset. - Drotherite telvaltva mordjuk a viset. - Drotkerite sel vargunk korilveve. \* Tanacitagok, otro sok, mjøgnerersk bejarnak, de a varge ergetlen irletben, patrhaban, trafikban sem lephet be senki. Kenyeret kihoznak a lephet be senki. Kenyeret kihoznak a ikeni hitk irodaba a jegginkre: Reggel ikeni hitk irodaba a jegginkre: Reggel tot mordatlamil dolgoznak kero delu Farris. ma pl. ket polos volt a konghála ahol 4 ferti alorik emeletes fajagakon o in egen nap (aldvavcontortation!!) for portinestruk, mostrek a holint es po soltmik. Templombamener addig nieg mus engedelijerve. Varguik 28-and patolohusah es 10-15 ref. - Prota a Drischnitz Bertivel egen nap volotel fasteorerben; W.C. ben fasar retiration) es poleskat, fogasokat acsoluak a la kasban. mi arnougok padlot, lavorok kasban. eipet pueslink, foziek, ve 2et hordnick, moraik, varalunk.

A borrybaren elvt fruekstlen sår, - aron til e. å. 5-8 m. myre sæmben å fabodes klosetok, myakip ero tærtalommal" is a penet godrok. - Ma borso leves es papor pås krumpli sås eledimk. Pista felis merhetetlemel mer ki, olgan sovany. briol hella nem ne tudjon. – En nig sorem, mut en temperes-talpes eseléa jaki segen nap foldmoss ronggyslots gvæik er a legneherebb minkat vegz Kesergesse mucs saero idouk. Nekeu uggan ma fokosottan hianysott a mise ever aldere Ha a go toton egenseget ad es ha nem lep fel itt bent jarvany, akkor talan ki brych. - Great elutarara sta mucs hirink, de job valaki omit, aki merélt hvy a sperek úggsvólván eggedül vovosk nyoman odas kerettek sama. Otaka plannensen dolovsik. amig nem ir vag mi - ne kuldfetek meki dsomagot Frurvel mi van? Mi len a kyulut valt Brianto len nekik is a kikoltore Ti stemelem maradtok? Ha neméh joé vamak Janes més Pesten van Vanak va lami megnynetati hist adjal, ne a valvagot. Armyéhat esokolom évlelet Priekkal mi van: - 319 -

Are Aunt Ila (Erno's Mother) and hers doing well? Is Jancsi (don't know who that is) still in Budapest?

We are prwying - tell our Father some calming news - not the truth. To Annis send our kisses and through you to all the family. May the Good Lord be with us all.

with love Boris"

My comments are in brackets. Gyuri is of course George, Pista his father. I acknowledge help received from George in translating the above communications.

I have a post-war document, dated 1948 (dealing with some estate matters) in which it is stated that Boris died on 15th July in Gyongyos. I don't know whether the date and place are correct. The fact is that both Pista and Boris died somewhere at about that time. It is possible that the above letter was the last one.

Mother and Erno were still free when Boris had written the above letter, but not for long. They feared death and Mother wrote about it openly in a 5 page letter which is addressed to us three children. It is her Testament. She says it took her about three weeks to complete from 29th April to 16th May 1944. Her Testament and a translation of it is in the appendix. In Slovakia the situation had not worsened as it had in Hungary's witch's kettle. On 25th April 1944 Anni wrote a card from Hlohovec to Mother. See exhibit 152. It is the last communication of hers I have. I am translating below:

#### " My Dears,

I received your two postcards with much joy but I am depressed to hear that you are not with Boris. I do hope that I will have more news from you tomorrow or the day after to hear more details. You can imagine Anyuci (a form of endearment for Mother) how I am longing for you. As far as my health is concerned I am now alright; my thymus was not too good hence my temperature. Now I am taking Vitamin D pills and the temperature has gone. At Easter I went to the Resurrection (service or procession) and I now go to church frequently to pray for my Licka (she uses a form of Mother's name Alice) and Ernö. The old gentleman (Grandfather) is well but in his ignorance he is like a child and he thinks that you are staying with Boris. I hope that you are enjoying Dasy's and her father's company. (This is the German rendering of Daisy, but don't know who they are.) Our house is more noisy again, as I have made it up with Manci (Pali's sister?) and Evi has been evacuated to us. (Perhaps another of Pali's relatives). In my

thoughts I am constantly with you and I kiss you dearly and also Boris, Yours you loving Anny Pali wrote greetings too.

In June Mother wrote to us that she is going for an "extended stay" to Anni and hopes that Erno will follow. She must have been in possession of a travel permit but. Erno had none - probably because he was Jewish - had to cross illegally.

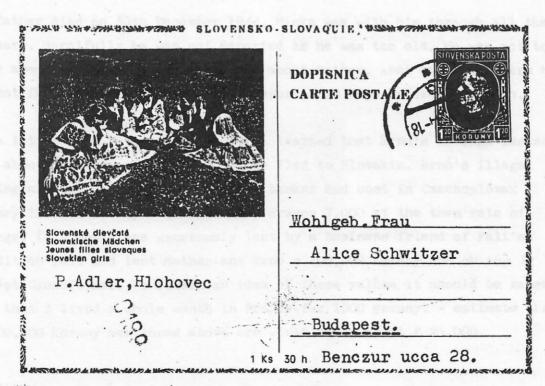
Slovakia was occupied by Hitler's henchmen in August 1944 and deportations of non-Aryan Christians started immediately. Mother's last communication is dated 20th August from Hlohovec. This is 4 days after Patricia was born. Mother knew that Jean was expecting a baby. Jean had written to Mother's Budapest address about this happyevent as we had no idea that Mother was by this time in a bunker in or near Hlohovec. Alas, our family in Slovakia din't know about Patricia's birth.

Some time at the end of August Mother, Erno, Anni, Pali and probably some of his family went into hiding in a bunker. They were safe and relatively comfortable until on December 2nd 1944 someone gave them away and they were caught. Mother and Anniwere transported to Ravensbruck concentration camp where they were still alive in March 1945 and miraculously survived the harsh winter months. Zsuzsi (now in Australia) was with them and told me something of the inhuman treatment that they had suffered. There is no further news about them after March. Some women were transferred from Ravensbruck to Bergen-Belsen but have no idea whether Mother and Anni were amongst them or not. They died about two months before the end of the war - perhaps even less than that.

Erno and Pali were taken to Berlin - Siemenstadt and were there together until January 1945. Erno was transferred to Buchenwald and afterwards to Bergen-Belsen. Pali was transferred to Oranienburg and then evacuated to Lübeck but the Russians liberated them in Mecklenburg. He was in hospital and finally got back on 4th August 1945. Erno disappeared.

Jam)

rather could not leave the farm and I don't know what happened to him except that I was told by Schnuki that he was shot while hiding in a maize field — but I don't even know who shot him. Photo 15% of Father is how I remember him. It was taken at about the time I left in January 1939. Other family members who have died: Schnuki's parents and her brother Bandi, Aunt Frieda and Aunt Leonka (her husband Emil died of natural causes in 1942), cousin George Szorenyi and his wife and daughter, the Manschburg parents.



25. IV. 1944

#### Meine Lieben !

Mit sehr grosser Freude hebe ich Deine zwei Postkarten erhalten nur bedrückt es mich sehr dass Ihr nicht bei Boris seid. Ich hofffe dass ich morgen oder übermorgen wieder näheres von Euch hören werde. Du kannst Dir ja nicht vorstellen Anyuci, wie sehr ich mich nach Euch sehne. Gesundheitlich bin ich schon ganz in Ordnung, meine Thymusdrisen waren nicht ganz in Ordnung und davon kam das Fieber. Jetzt nehme ich ein D-Vitaminpräparat und Fieber habe ich keines mehr.-Zu Ostern war ich bei der Auferstehung und gehe jetzt oft in die Kirche um für meine Licka und Ermö zu beten. Dem alten Herrn geht es gut und in seiner Unwissenheit ist er schon wie ein Kind und meint er Ihr seid bei Boris.-Hoffentlich gereicht Euch Däsys und Ihres Vaters Gesellschaft zum Guten. Unser Haus wird wieder lärmender sein, da ich mich mit Mancis ausgesöhnt habe und Evi evakuiert zu uns. In Gedanken bin ich immer bei Euch und küsse Euch innigst und auch Boris

a gondh les iditte potest grade la Deine Dich liebende

15. This is the last communication of Anni's to Mother which I have. It is dated Hlohovec 27th April 1944. Translation is on page 320

Grandfather died on 30th December 1944. Micka was with him through all the war years. Mercifully he was not deported as he was too old. He was not told either about Boris's disappearance nor about Mother, anni and the others hiding not far away and of having been deported 28 days before his death.

From a letter from Pali after the war I learned that Erno's savings lasted until about the time when Mother and he fled to Slovakia. Erno's illegal crossing and the cost of hiding in the bunker had cost in Czechoslovak currency 120,000 Koruny or about Swiss Francs 7,000 at the then rate of exchange. This money was generously lent by a business friend of Pali's. In addition Pali had lent Mother and Erno c 100,000 Koruny and on top he had kept Grandfather. To obtain an idea of these values it should be remembered that I lived a whole month in Prague for 1000 Koruny. I estimate that the 220,000 Koruny mentioned above are worth today about £ 25,000.

#### ANNI

I feel particularly sad about Anni, and remorseful. She was 21 when war broke out and only 26 when she died. Photo 153 shows her in Novy smokovec in the Tatras (she was there with Mother, see photo 74 on page 128). It is postmarked 9th February 1938 when the National Winter games of the SOKOLs, a national sports organisation, were held there. She wishes me a happy 21st birthday and writes: "I wish you all the reasonableness that your coming-of-age requires". Photo 154 was taken in March 1939 and sent to me in England.

At an age when other women were enjoying life she had experienced terrible suffering, humiliation and torture and then died tragically. Anni was a sensitive person. She took things more to heart than Jean or me. She was also more impressionable and reacted more sensitively and emotionally to people and events. Yet she had a mind of her own and knew what she wanted. I have already mentioned how as a little girl she had dreamt that a friend's house was on fire which proved to be the truth. In some ways her and Mother's characters were similar. They loved each other deeply yet they could also quarrel with each other often about trivial matters like what dress to wear or buy. On a couple of occasions Anni ran away from home after a quarrel and we were frightened, ran after her, looked for her everywhere. She came back and both Anni and Mother were full of remorse and made it up with tears.

Mother unintentionally favoured me as the oldest and the boy and when we were children Anni and I were often at loggerheads and quarelled and hit each other. On one occasion we all stayed two or three nights at the "Carlton" Hotel in Bratislava. I forget the reason but perhaps there were painters in the flat. I picked a quarrel one evening just before bed time; Anni cried and I hit her and nearly suffocated her with a pillow. It was aterrible scene and I always remember this incident with shame and horror. Because Anni was considered to be "difficult" she was sent to a Roman Catholic boarding school, the Sacre Coeur de Notre Dame (?) in St. Polten above the Danube not far from Vienna when she was 10 or 11 years old. She remained there several years. We visited her on several weekends and for the long vacations, Christmas, Easter etc. she came home. The milieu there was totally different from what Anni was used to. There was much coercive religion. going to Mass and veneration of the Virgin Mary. The girls came from a crossection of mainly Austrian society, many from simple country families, some from the gentry. The teachers were nuns. Anni accepted it apparently all and immersed herself in the conventions and rites of the convent school. Yet I suspect deep down she rebelled against it; she wanted to be at home. the same as Jean and me. Yet she absorbed many of the good precepts and acquired a deeper view of life at an earlier age than Jean and I did. I think she was also more religious although she did not care for the external trappings of the Church. She returned a year or two before taking Matura and then went to the same Realgymnasium as me and later Jean. I could not understand her and was no help to her. I think she was also more affected by our parents's divorce than either Jean or me. It saddened her perhaps more which in turn affected Mother who perhaps felt less sure of handling Anni than us, because of this. In her Testament (see appendix) Mother hints I think at this.

Anni grew up into a beautiful girl. Well dressed, well groomed with an engaging smile, ladylike and good in conversation with her contemporaries and with adults. She was much in demand by young men and had one or two relatively long-lasting relationships including with Jeno Rees but which never went beyond the bounds imposed by our society and I think also due to her religious beliefs. Perhaps she felt lonely and misunderstood at home and was in need of friendship with men. But she also found it difficult to make up her mind about a partner for life.

The fact is that I knew little about her emotional life. We never managed to confide in each other. Especially after I had gone to Prague and spent only short periods at the flat in Bratislava, we saw little of each other — which also applies to Jean and my parents.



153. Anni in Nový Smokovec February 1938, 20 years old

154. Anni in March 1939 nearly 21 years old



Rama a Xmas

155. The Bamag Christmas party, 1944. I am in the back below the wall clock which shows 5 min after 4 pm. Parties started early because of transport problems

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Anni knew Pali Adler already before the war. He was several years older than her. I suspect he was not really the man she wanted. They became engaged at about the time I left for England in January 1939. He was a Jew and I don't know whether he ever converted to Catholicism. They had active plans to emigrate to Kenya but the outbreak of the war thwarted this plan. Judging from her letters and cards to Mother she grew up into a responsible, caring and loving woman. I hope she and Pali were happy. They shared the terrible experiences of the war.

Jean and I were totally ignorant of the fact that in Decmber 1944 Mother, Anni, Pali and Erno had been deported nor did we know anything about the fate of Father, though we knew that Mother and Erno had moved to Hlohovec. We hoped for their wellbeing and survival.

At SMH there was the usual Nativity Play and Christmas Dinner. There was much merry making as the war was approaching its final phase, despite of the v2s still falling on London. The Bamag Christmas Party was a success as in previous years. See exhibit 155.

In the earlier part of the war London was "empty" . Schools, Universities, hospitals, mothers, children and babies had been evacuated. It was easy to find a table in a restaurant or seats in West End cinemas and theatres. When I could afford it I started to go the the theatre, opera, ballet and cinemas. The partial absence of Iendon'd population was to some extent replaced by members of the armed forces from the USA, Canada, Australia, New Zealand, Belgium, France, Holland, Norway, Poland, Czechoslovakia and one or two more countries and of course Britain, many of whom spent some of their off days in London. The Americans were the most numerous after the British. They had a number of facilities, one of which was The Rainbow Club in Shaftesbury Street north side, next to Piccadilly Circus. After blackout was lifted there were always uniformed men and women milling around Piccadilly Circus and Leicester square and that part of the town became rather crowded. The press carried self-congratulatory accounts of the heroic Londoners and their wonderful spirit, bearing up under the "blitz" and the lethal V2s. Hationing continued rigorously and some items suchas meat continued to be rationed until the early 1950s.

In January 1945 the Russians took Budapest. In February 1945 churchill, Roose-velt and Stalin met in Yalta. On 8th March the Allies crossed the Whine and the war was now being fought on German soil.

The Russian Army occupied Nitra on 29th - 31st March 1945. The field HQ of the Russian army was established a few days before in Lapasske Darmoty, the village where Teri and Magda and Paul Verö used to live. The army must have passed through Velky Lapas and our fields on their way to Nitra. It is possible that father was murdered then. If it is, however, true that he was hiding ina maize field when killed, then it could not have been in March. I shall never know. Lapasske Darmoty was renamed after the war to Golianovo, I presume after a Russian officer.

on 11th April 1945 the Russians entered vienna. Mussolini died on 28th April from a bullet. Hitler committed suicide in his bunker on 1st May. On the following day Berlin capitulated, German forces capitulated on all fronts during the next days and Victory in Europe, VE DAY, came on 5th May 1945. There was no work done in offices and factories and few could have stayed at home unless lame or ill. Newspapers carried hige headlines about the victory. Closing hours in pubs were not observed. Soldiers in the uniforms of all the Allies were arm in arm with vivacious girls and civilians of every shape and size, singing, marching, dancing, whistling, embracing, laughing, joking, disregarding traffic lights, drinking, thronging through London all day and the evening and next day. A group of us from the office walked along Victoria Street and already from a distance we heard thousands of voices singing and rejoycing on Parliament Square. As we came closer we saw a vast mass of humanity in various phases of good-humoured dissipation filling the square. all traffic having stopped. The crowd shouted "Churchill, Churchill, Churchill". Suddenly he appeared on a small balcony of the Ministry overlooking the Square. He had to be supported, probably having had a brandy or two and he waved with his hand clutching a foot long cigar. A loud cheer from thousands of throats rose into the air, crescendo and fortissimo.

We had to fight our path through Whitehall. Trafalgar Square was tightly packed sea of heads and it took us quite a time to fight our way to Piccadilly Circus, losing some of our colleagues and then arm in arm with strangers and then losing them and just being carried along with the throng. Outside the Rainbow Club American srvicemen, white and black skinned, handing out bottles of beer and in the windows more of them "making whoopee". It took a few days to get used to the idea that the war was over and to take account of the latest events. It took time to get accustomed to peace - though the war in the East had not yet ended. "Never again" said the newspapers and "Never again" said all of us.

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Victor was posted to Ceylon before VE day and later to Singapore. I kept the flat for a while. I was all alone when I received the shattering news from Pali Adler that my parents, Anni and others dear to me had perished. I had never known until then what pain is. I broke down and for days walked in a daze.

I threw myself into my work at Bamag's with intensified concentration. It was now clear to me that I would stay in England. I couln't possibly live in Czechoslovakis again even though Benes and the Government in exile returned and re-established what looked like a democratic state. Judy and Olda Prec and others also returned, but many stayed in England and some emigrated further like Henry Brompton, Jeno and Zsuzsi Rees and Leslie and Marika Eggerton. I decided to apply for naturalisation papers which one was entitled to do after 5 years of residence in England.

Sometime in 1945 I gave up the flat and left Bloomsbury, though I still remained a member of SMH and of its Students Committee. I moved into slightly better quality room in Leinster Square, Bayswater.

John had resumed his studies in Cambridge and moved there with Jean and Patricia. Later they bought house in the Elham valley near Folkestone where I spent some wekends with them. Exhibit 156 shows Jean and Patricia some time in 1945.

The country was in an odd mood. As soon as the victory celebrations had petered out, problems came crowding in. The way in the East could still drag on for a long time and more British forces were despatched there. India and nearly all other parts of the (non-white) Empire were clamouring for independence. There was much heart-searching and discussion in Parliament, in the press and in SMH. The economic situation was terrible. Lationing continued. There were mounds of rubble in London and other towns and reconstruction was a formidable task ahead. There was a housing shortage and everywhere in the suburbs one saw temporary Nissen houses - "pre-fabs" - going up. The evacuees returned, as the Allied soldiers moved out. Britain had won the war but was in danger of losing the Empire. The nation was waking up to the possibility that Britain was becoming a small country with all that that entailed in economic readjustment.

The European war over, there was no need for an all-party National Government. Clement Attlee and the other Labour party ministers resigned three weeks after

VE day on 23rd May 1945. Churchill formed a "Caretaker" Government. A general election was called for 26th July 1945. Churchill was now leader of the Conservative party. I did'nt like that nor did many others, despite the universal veneration Churchill was held in as the architect of the victory. His electioneerong appearances turned into triumphal ovations for him as the "British bulldog" who had led the country to victory. The ovations were not for him as the leader of the conservative party which had learned nothing since Chamberlain.

The Potsdam conference at which Truman (Roosevelt's successor), Stalin and Churchill were present started on 17th July and was expected to last some ... weeks. Attlee was also present in case the Labour party were to win the elections on 26th July. Both the British leaders spent some time at the conference and some at home electioneering. Labour won the election with an overwhelming majority of 186 seats, a shattering blow for Churchill and the first time that the Labour party had formed a Government. Attlee returned to Potsdam alone. The conference ended on 3rd August but much of the time other ministers deputised for Attlee.

(in the 1950 elections Labour's majority was reduced to 8 seats; that was the first election I voted in, having become a pritish citizen in 1947.

I voted Labour. In the 1951 election churchill's Conservative majority was 16 seats. I voted again for the winning party).

The atom bomb was dropped on Hiroshima on 6th august 1945 with all its attendant horror. On 2nd September 1945 Japan capitulated.

Peace at last the world over.

156. Jean and Patricia about 1 year old,1945
Photo: Halksworth Wheeler 2, Church St.
Folkestone, reorder number 1164