A HOUSE WHICH TURNS TOWARD THE SUN

By Stsley Huddleston.

How many of us have longed for a house whose windows might always face the sunlight! Such a house has been designed by two Parisian architects, Georges Lecuyer and Henri Jubault. It is called the Villa Tournesol and revolves on a platform to suit the desire of the occupant.

The complete model, perfect in every detail, has been exhibited at the Exposition de l'Habitation et des Arts Decoratifs, which has been opened at Nice. As may be supposed, it is the most attractive of all the exhibits, and has provoked many columns from the pens of descriptive writers and social commentators.

The Villa Tournesol is a comfortable and spacious abode. It reposes on a round mobile platform in metal and concrete. To some extent this platform is similar to the turntables used in railway yards. It has eight large beams placed starwise on a central pivot. At the end of each beam is an iron wheel which is inserted into a circular rail. Sufficient space is left for periodic examination and repairs.

Needless to say, the foundations, of reinforced concrete, are extremely solid, and are built on a special plan. The mechanism of gyration is simple enough, and is worked by an electric motor. In the interior of the house a button may be pressed, and the structure will start to turn slowly. It can be stopped instantly. With a motor of four horsepower, it is calculated that the complete circuit can be made in an hour. That is regarded as rapid enough, and generally speaking, the house may be turned toward the sun in a few minutes, while even when the edifice is in motion it may be entered easily.

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It will at once be understood that no extraordinary ingenuity is required to carry out the scheme; and yet a revolving house strikes one as almost revolutionary. The architecture is sober. The polygonal form has been preferred, because it is less monotonous than the round form. The eight sides of the house give it a pleasing appearance, and they have been made as decorative as possible. It is Lucien Boudot, who is known for his originality of style and his exceptional taste, who has been called in to make the design harmonious and truly artistic, and he has also made valuable suggestions for the internal arrangements.

The rooms of a house are generally more or less rectangular in shape, but in the Villa Tournesol they are naturally V-shaped. At first sight it would seem to be difficult to compose such a room which should be agreeable to the eye. But the difficulty has been overcome by a dexterous distribution of various projections.

Quaint cupboards have been placed here and there, for instance, while sections have been cut off to serve as pantries and other offices. Furniture has been disposed in such a manner as to break up the lines—furniture especially adapted to the character of the rooms. As a rule, clear colors have been chosen, which will enhance the effect of sunlight, but although black is banished, startling colors are also avoided. Thus a bedroom is in mahogany with silver chairs and mauve hangings. This combination is said to be ideal for a room in which the rising sun will enter.

In the studio almond green and old Utrecht yellow are adopted. Even such details as the covers of the books, which are in yellow, have been carefully considered.

An internal court has walls of Wedgwood blue, and is paved with white and blue marble. The bathroom is in tones of light pink. Everything in the house is designed in conformity with the notion that it may be turned toward the sun.

Bordering the revolving platform is a terrace with a balustrade. On the roof is a terrace with a pergola, and in the centre a glass-covered dome.

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It may, however, be asked what price is required for such a house. The model that is shown, with its large vestibule, its bureau, its salon, its dining room, its big kitchen and offices, its two bedrooms, its bathroom, its closets, its cabinets, and roomy cupboards, and its central court, its roof terrace, and its external terrace, is estimated at 1,250,000 francs, or about $50,000. This includes the decorations and the furnishings of the most sumptuous kind. The mechanism, however, only represents 200,000 francs, or some $8,000.

For persons of limited means it should be added that the authors of the project declare that it is possible to build smaller and less luxurious villas which will turn on a pivot at very little cost. The mechanism of these villas is estimated at 20,000 francs—that is to say, considerably less than $1,000. All kinds of economies can be effected on the ornamentations and furnishings, and, in short, a house that turns toward the sun at the pleasure of the occupant can be had for a most reasonable rate.

M. Sergine, writing in l'Illustration, rightly says: "After the instinctive surprise caused by the idea of a turning house, one will quickly become accustomed to such a realization and even be astonished that it should have been thought of so late; for by its form and its rotative movement, the house is in perfect harmony with the form and the movement of the universe."

In any case, there is something peculiarly poetic and attractive in the project, and it is safe to say that this combination of modern mechanism, artistic taste, and the natural love of sunlight, will before long be given in France, in England, and in America practical shape, and many people will avail themselves of the new possibility of living always in the sun.

After their Canadian visit the boy choristers of the Royal Chapel return to England, some of them equipped with skates they secured in the Dominion.

FOREST POLICY OF ONTARIO PROVINCE

Secure Co-operation of Townships, Municipalities and Farmers to Aid in Work.

STOP EXPORT OF PULPWOOD TO CONSERVE TIMBER

Revision of their forest policies seems to be in order in the great timber provinces of Canada to the end that their forest wealth may be further assured of preservation and their forest industries of stabilization and perpetuation. The Quebec Government recently moved to take steps to protect its forest industries by following up more actively its policy of safeguarding the forests through replanting and ensuring an abundance of supplies for those mills already in existence before favoring the establishment of other mills. Now the Ontario Government, which has always shown itself progressive in forestry matters, is inaugurating a new and novel policy of conservation calculated to further preserve and perpetuate the province's forests to the people through enlisting the support of the general public in the praiseworthy work.

"Ontario leads the world in timber wealth, in spite of the enormous commercial demands being made upon its resources and a fire menace which has destroyed many millions of acres and is still a problem of great concern to the Government," stated the Minister of Lands and Forests presenting to the provincial legislature his policy which aims at further increasing this wealth and at rehabilitating the forest lands within the limits of the province. The amount of white and red pine alone in the province he estimated as sufficient to last for fifty years without counting on ned growth, ensuring vast revenue to the province.

COMMERCIAL DEMAND HEAVY.

The commercial drain on the province's timber resources is very large, both through the lumber and the pulp and paper industries. The first sale of pulpwood was made in the province in 1891 and to-day, of the $500,000,000 invested in the industry, Ontario is represented by about $175,000,000. Of the nearly $210,000,000 invested in the lumber industry of Canada, almost $55,000,000 is concerned with Ontario operations. For the last five years the average annual value of the production of lumber, laths, shingles and ties has been approximately $37,500,000; pulp and paper, $66,642,000; pulpwood exported, $3,300,000; and fuel wood, $12,229,000; or a total of approximately $120,000,000.

One compensation for the depletion of the pine resources has been the rapidity with which other timbers, poplar for instance, were taking its place. Poplar is now coming greatly into demand for the manufacture of fine paper and this fabrication has been successfully inaugurated in the province. At the same time it is the declared intention of the Government to stop the export of pulpwood as rapidly as possible. While it is recognized that Ontario has great timber resources yet, Northern Ontario, for instance, having vast stretches that are barely scratched, the Government thinks it advisable to take early measures not only to conserve this forest wealth but ensure the future of the pulp and paper industries, and the new measures of the Minister of Lands and Forests are aimed at this.

NEW REFORESTATION POLICY.

The new policy is directed at securing the co-operation of the townships and municipalities of the province and the farmers of the southern area to aid in the work. These will be invited to set aside tracts of land for reforestation purposes, farmers being asked to devote ten acres, the poorest on their farms, to this purpose. The Government will provide the trees and attend to their planting, at the same time giving the growers three options. After a period of thirty years the growers can take over the tracts planted entirely from the Government, or return them to the Government, or enter into partnership with the Government in the reforestation plan.

While this will go a long way towards building up Ontario's forests, it does not affect the province's greatest menace, that of fire, but it is gratifying to learn that energetic measures are resulting in a diminution of the annual loss by this means. In 1923 Ontario lost 2,120,148 acres of forest land through fire; in 1924, 146,000 acres; in 1925, 187,000 acres; and in 1926 the efficiency of fire patrol reduced this to 82,000 acres. The Ontario Government had gradually built up and developed a very able aerial forest patrol service, and has at Sault Ste. Marie what is claimed to be the greatest areodrome centre in America from which fire-fighting forces are able to spot fires and extinguish them before any great damage is done. In 1926 the cost of fire protection amounted to about $1,000,000, $300,000 of this being contributed by lumbermen who hold concessions in the area.

A SANE AND HEALTHY POLICY.

Ontario, in common with the rest of Canada, is endeavoring to follow a sane and healthy policy with regard to its forests and the insurance of future supplies. The pulp and paper industry has in record manner reached the leadership among Canadian industrial ativities and it is felt has attained adequate heights of production having regard to forest resources. Nothing in Ontario, according to the Minister of Lands and Forests, has done more to stabilize industrial conditions than the pulp and paper industry, but now, following the example of Quebec, the Government hesitates to make further commitments.

Canada's Virgin Soils.

Few people realize how steadily land settlement is continuing in the west. In 1926 up to and including September over 5000 homesteads were taken up in the four western provinces, representing an area of over 630,000 acres. This was nearly double the area taken up in 1925. There is still much virgin land in Canada capable of tremendous production agriculturally and this is equally true of every section of the Dominion from the Maritime Provinces to the Peace River country.

Your Bill, Sir?

A novel type of taximeter supplies the passenger at the end of his journey with a printed ticket showing the exact amount of fare due.

The Joyous Wanderer.

I go by road, I go by street—
Lira, la la!
O white high roads, ye know my feet!
A loaf I carry and, all told,
Three broad bits of lucky gold—
Lira, la la!
And oh, within my flowering heart
(Sing, dear nightingale! is my Sweet,

A poor man met me and begged for bread—
Lira, la la!
"Brother, take all the loaf," I said.
"I shall but go with lighter cheer"
Lira, la la!
And oh, within my flowering heart
(Sing, sweet nightingale!) is my Dear.

What They Are Saying.

Life is too short to waste it on being miserable unless you really enjoy being miserable.—Miss Dorothy Dickson.

The present generation is a very bright generation. It is better-looking, healthier, stronger, and keener than its predecessor.—Lord Riddell.

People have no more right to be ill than they have to be criminals.—Sir W. Arbuthnot Lane.

Nine-tenths of the things an adult does are done because other people do them.—Dr. J. A. Hadfield.

The world is much the best university. One does not begin to learn until the gates of the college have closed behind one for good, and the problems of life are met in actual experience.—Lord Abercronway.

We are still a very long way from having exhausted the possibilities of wireless to anything like their full extent.—Senatore Marconi.

Hard work is the friend of the soul, the guardian angel of the conscience, medicine for the body, and protection against all sorts of temptation.—Gen. Bramwell Booth.

Friends.

After all this, treat thy friend nobly, love to be with him, do to him all the worthinesses of love and fair endearment, according to thy capacity and his. . . . Give him gifts and upbraid him not, and refuse not his kindnesses, and be sure never to despise the smallness or the impropriety of them. . . . So must the love of friends sometimes be refreshed with material and low caresses, lest by striving to be too divine it becomes less human: it must be allowed its share of both: it is human in giving pardon and fair construction, and openness and ingenuity, and keeping secrets: it hath something that is divine because it is beneficent; but much because it is eternal.—Jeremy Taylor.

Paper Fagots for the Grate.

When a grate fire is wanted and neither coal nor wood is at hand, paper fagots may be quickly made from old newspapers. Two or three sheets only should be folded together in the original folds and then twisted very tight. It is surprising how successful such a fire will be, and how enduring. It is also very beautiful, for the printers' ink contains chemicals which produce the most unusual green and blue flames. If one cares to take the trouble, such fagots may be made in quantities, thoroughly soaked in water, and dried. So made, they will be found to be almost as hard as wood and quite as lasting for fuel. This is not difficult to understand when one remembers that the paper itself is made from wood pulp.

Silk From Wood.

Nearly seven tons of wood are required to produce one ton of artificial silk, and for the same reason that Canada has become an outstanding producer of newsprint—namely large resources of suitable pulp timber and convenient natural power sites, the Dominion is also destined to become one of the great rayon textile manufacturing countries. She already is a heavy producer of pulp used in this industry and many millions of dollars are being invested for its further manufacture into rayon yarns and cloths.

Canadian Honey of High Quality.

One of the most wholesome and easily digested sweets in the world to-day is produced in Canada in quantities sufficient to maintain a large export trade, says the Natural Resources Intelligence Service. Honey is the sweet in question. Honey is really a predigested food as the bees have modified the sugar content of the nectar. Hence it is a very valuable food for children and invalids without in any way impairing its food value as an everyday relish. Canadian honey has a world-wide reputation for its high quality and pure consistent flavor.

Had to Play Ball.

It was a lovely summer afternoon and school was nearly over. Jones was looking forward to a game of baseball very soon — and then the blow fell.

"Jones," said the master shortly, "your last sum is wrong, you'll have to stay behind and work it out again." Jones gulped, and then he said, "How much was I wrong by, sir?"

"Three cents," replied the master.

"Well—well, sir," stammered the boy, as he put his hand in his trouser pocket, "do you mind if I pay the difference? I've got a match on this evening."

FLOUR MILLING INDUSTRY OF CANADA

Competes for Leadership With the Pulp and Paper Industry.

REMARKABLE GROWTH OF FLOUR MANUFACTURE.

The Canadian flour milling industry is one of the main sources of Canadian industrial revenue, this manufacture vying with the pulp and paper industry for leadership among Dominion industrial activities in point of value of annual production. A recent Government survey covering this industry since the first Dominion census was taken in 1871, reveals the remarkable growth of flour manufacture in Canada, which has in the time placed its product on markets all over the world and made it as potent an advertiser of Canadian quality as the country's wheat. The development of the manufacture of flour in Canada has, in fact, very largely corresponded to the settlement and cultivation of the great wheat growing territory of Western Canada, and it is reasonable to suppose that the future of Canadian flour production will be gauged to some extent by further settlement in the wheat growing areas, which have recently been considerably expanded.

In 1871 the capital invested in the industry amounted to only 9,929,898, and the production to $39,135,919. By 1891 the capital was $23,039,041 and the production $52,423,286. In 1911 capitalization was $42,905,689 and production $82,494,826. In 1925 the capital invested had grown to $80,104,258 and production to $187,944,731. Analysis of investment shows it to be over fifty per cent. Canadian and the rest mainly United States. In this last year a total of 6,166 persons were employed in the industry and paid $7,190,022. The cost of the raw materials used in the industry in 1925 was $163,164,668, making the value added by manufacture $24,780,063. In the fifty-four years since the first census was taken the capital in the flour milling industry of Canada has increased by over 500 per cent. and the production by over 380 per cent.

THIRTEEN HUNDRED MILLS OPERATING.

In 1925 there were 1,310 mills in operation in Canada, 455 of them being flour and grist mills and 855 chopping mills. Ontario is most active in this industry with 664 mills, followed by Quebec with 392 mills. Alberta has 65, Saskatchewan 61, Manitoba 36, New Brunskick 35, Nova Scotia 28, Prince Edward Island 24, and British Columbia 5. The total milling capacity in Canada, per 24 hours, in 1925 was 120,751 barrels, of which Ontario accounted for 63,068 barrels, and Quebec 22,264 barrels. Western Canada's daily capacity was 33,486 barrels and that of the Maritime Provinces 1,933 barrels. The tendency of late years would seem to have been for new mills to locate in the Prairie Provinces, in the heart of the wheat country from which they draw their raw material.

In the production of 1925 the outstanding item is that of wheat flour which amounted to 17,769,366 barrels with a value of $131,870,175. In the manufacture of this flour, 95,750,771 bushels of wheat worth $112,419,521 were used. This amounts to very nearly 80 per cent. of the Dominion wheat production of 1924 which would be utilized in the manufacture of flour in the following year. Of this manufacture in the year 10,318,840 barrels worth $74,319,169 were exported, or between 58 and 59 per cent. of the total volume of production. At the same time 51,697 barrels worth $450,161 were imported, making a Canadian domestic consumption of 7,502,223 barrels worth $58,001,167, or a per capita domestic consumption of .81 barrels worth $6.26.

FLOUR EXPORTS AND CUSTOMERS.

Wheat flour exports from Canada increased in volume in 1926, though on account of lower prices prevailing the total value was slightly lower. Shipments from the Dominion in that year amounted to 10,456,916 barrels valued at $71,993,608, as compared with 10,318,840 barrels worth $74,319,169 in 1925, and 11,476,868 barrels worth $64,295,566 in 1924. The value of Canadian flour exports has practically doubled in the past ten years, shipments in 1916 amounting to 6,400,214 barrels worth $35,767,044.

The United Kingdom was Canada's first flour customer in 1926, taking 8,526,630 barrels worth $24,335,878, as compared with 2,657,999 barrels worth $18,701,231 in the previous year. The next heaviest importer was Germany, which similarly increased its purchases. Newfoundland and Brazil and Greece each purchased Canadian flour to the extent of over $2,000,000 in the first nine months of the present fiscal year, and Trinidad and Tobago, China, Denmark and the Irish Free State were responsible for buying to the extent of about a million and a half dollars. Jamaica French West Indies, and Norway were all over the million dollar mark in their purchases and Venezuela just under that figure.

The Adventurous Brook.

The tiny, excited brook romps and gurgles with delight at the prospect of seeking adventure. Its exalted babble mingles with the lowing approval of the cattle in the near-by meadows. It wends its irresponsible way in a lurching, twisting, carefree manner. The silly little brooklet has not a single worry.

Bushes line the banks in an effort to ward off possible harm. Their slender arms wave a farewell to the stream as it rushes by. The tall, proud trees on the hill seem to smile at its childish antics.

Pieces of flotsam retreat to tiny, quiet bays as though trying to catch their breath. They then again join their joyously carousing comrade who has swaggered on alone. A leaf from a neighborly tree is aroused from its lethargy and swirls down to take part in the fun. A twig comes hurrying after in an effort to join these strange playmates.

A motherly bush reaches out a watchful arm and stops the twig long enough to gently admonish it to behave. She then reluctantly releases it to resume its wild gambols.

The brook passes beneath a frowning bridge, giving its base a mischievous slap as it swishes along. A dam causes the brook to hesitate a moment in wonder. It becomes solemn and quiet for a few minutes as it struggles to understand the meaning of this strange obstacle. The undaunted stream hurdles the barrier and continues its mad pace. The dam has been too difficult for the childish brook to understand.

The banks for the first time notice its rapid growth and draw away from it in cautious regard. The stream slows down its pace in consternation. It ponders on their strange behavior. It becomes more taciturn and quiet, brooding to itself. The brook hesitates, but briefly, however, only to move swiftly and excitedly onward. It then rushes along furiously, considering its fancied wrong, tumbling over a falls with an indignant booming roar. It boils with rage. The stream slowly calms down and begins to realize the truth. It has matured and is no longer a little brook but a full-grown river.

The river thoughtfully continues on its way, a great, humble, placid stream. It gently flows along, caressing the soft, grassy banks, trying to make up for its outburst of childish temper.

The apology must have been accepted, for the river continues on its way with a soft murmur of happiness. To know the happy consciousness of the thirsty animals partaking of its precious fluid, the trees stretching out their long trunks endeavoring to secure their share of the crystal water, is its reward.

The big river is at last contented, for it realizes its grand purpose—the privilege of helping others.

Utilization of Natural Gas.

The low cost of production of natural gas coupled with the belief that the supply was inexhaustible has in the past led to certain abuses in Canada. In days gone by, in towns lighted by natural gas it seemed to be an extravagant expenditure to pay a man to turn the gas off in daytime so the lights were allowed to burn throughout the twenty-four hours. And in Western Ontario, where the earliest wells were drilled from 1890 to 1895, there were few customers in Canada but large potential markets in the cities of Detroit and Buffalo, the product of the wells was heavily exported; this export was curtailed in 1898 and 1900. Canadians are wisely learning more and more to put their raw materials to industrial and other uses at home rather than disposing of them in an unmanufactured state.

Distribution of Canada's Water Power.

The significance of the distribution of Canadian water power in relation to its present and future requirements, may be appreciated when it is realized that 82 per cent. of the total developed water power and, roughly, 60 per cent. of the total resources are situated in Ontario and Quebec, which also contain 82 per cent. of the manufacturing industry of the Dominion.

Canadians Like Eggs.

To supply the breakfasts and egg-nogs, etc., of the Canadian homes nearly eleven million dozens of eggs are kept in storage. This is over a dozen for every man, woman and child in the country. Similarly nearly five pounds of meat per capita, excluding poultry, are available, and 2½ lbs. each of butter and cheese.

FLIGHT-LIEUT. C. R. CARR

One of the two R.A.F. officers, who, in a powerful airplane, will, next May, attempt the quickest and first non-stop journey to India.