

Oldest of Intermarine Canals

THE canal in southern France which, with the help of the Garonne river, unites the Atlantic and the Mediterranean is the oldest, longest, and least known of the world's intermarine canals. Built in the seventeenth century, it has always been known as the Canal du Midi or du Languedoc. Starting at Toulouse, it runs about 150 miles in an easterly direction until it finds the Mediterranean at the port of Cette. It is thus about three times as long as the Panama canal, but in its locks, proportions, boats, and general traffic it is very similar to the Erie canal in its palmy days, writes Frank R. Arnold in the Los Angeles Times.

When you come out of the railway station at Toulouse you have to cross the canal before you can get into the city. The boulevards along by are named for Riquet and Bonrepos; for the father, who planned the canal but died six months before it was finished, and the son who completed the work. And a little way up the canal is a statue to Pierre Paul Riquet, the inscriptions of which give the history of the canal in a nutshell. One side tells how the two seas are joined at the divide of Naurouse and how the water comes down there from the mountains to make the commercial highway. From the other side you learn that the edict for construction went forth from Louis XIV on October 5, 1666, and that navigation began on May 15, 1681, and that the grateful city of Toulouse dedicated this monument to its benefactor in 1853. Riquet quite modestly turns his back to his great work as well as on a set of veterinary school buildings on the other side, and beams on Toulouse. Well may he look at the city with satisfac-

7,200 workers, including 600 women, while 1,000 others were busy on the mountain reservoirs and ditches. The first stretch on the east side was as far as Trebes, beyond Carcassonne, and, as locks abound, it took more time. The first important town you come to is Castelnaudary, a dead, provincial town with the usual central square surrounded by sleepy cafes. The harbor is finer than that of Toulon, and the town rises from it to the octagonal church tower with a certain gray dignity for all the buildings are of stone on that side of Naurouse.

From Castelnaudary on to Beziers the Black mountain is ever on the left, while to the right are distant glimpses of the Pyrenees. The country becomes more and more southern in appearance until you reach Carcassonne, which rises up from the Aude, the most medieval sight in France. From then on the country is wholly given over to the grape, and you can see the peasants dusting the leaves with Bordeaux mixture. At the Cresse river the canal sends an eighteen-kilometer branch down to Narbonne, whose cathedral spires are plainly visible against the southern sky. Then, all the country becomes an ancient lake bed converted into a mammoth plain of vineyards. It is the former marsh country of the old Lake Rubrens, which calls to mind by its geological history the ancient Lake Bonneville of the state of Utah. Out of it you drop into the Mediterranean marshes by the Malpas tunnel, 120 meters long. This is an extraordinary knot of thoroughfares. Above the hill is the old Roman road from Beziers to Narbonne; through the hill is Riquet's tunnel, the first subterranean canal in the world, and below are two other tunnels, one for the railroad and one



WHERE THE CANAL CROSSES THE ORB AT BEZIERES

tion, for his canal in his day was almost as great a feat of engineering as the Panama canal is today, and it laid the foundation for the prosperity of Toulouse as a center of inland commerce.

Through a Farming Country.

As you leave Toulouse for the Mediterranean, the canal, on mounting toward the divide, passes through a fine corn, wheat and alfalfa farming country. It is a broad, fertile plain shut in on both sides by low hills like the Platte valley in Nebraska. A rare thing in France, where villages abound, it is a country of scattered farms, even the churches with their octagonal brick towers in the Toulouse style having only one or two houses about them. Flocks of geese are in every barnyard, for geese is the mainstay of the local meat supply. White oxen do all the work in the fields, but are too "molasse," the boatmen say, to draw the canal boats. A New Englander would say they are as slow as cold molasses. The canal banks are lined with elm and plane trees, and the views between give a series of moving farm pictures that stand out with a Colorado-like clearness, for this country is what Henri Martin, the Paris mural painter, calls the land of lupid light.

It takes from one to two days to reach Naurouse, where the divide is. Here one has the best chance to see how admirably Riquet planned his work, for it was there he solved the chief difficulty of the canal, the problem of water supply. Up to the north and east, for twenty-five miles at least, extends the Black mountain, the most southerly ramification of the Cevennes. On the Toulouse side is the River Sor, and on the Mediterranean were many small mountain streams running into tributaries of the Aude, the chief river on that side. Riquet, who lived at Revel, not far from Naurouse, had given twenty-two years of study to the problem before he proved to the king's commissioners that he could tap the Sor on one side and bring the Alzu, the Lampy, and three other mountain streams into a reservoir above Naurouse.

Beyond the Divide.

The Toulouse side of the canal Riquet pushed through in about two years, having at one time a force of

for an aqueduct—some perforation, a modern would say.

Down to the City of Cette.

In the flat country to which the canal descends by nine locks at Beziers are three volcanic humps, two rivers and a lake. The humps represent first Beziers on the Orb river, then Agde by the Herault, and finally the mountain of Cette close to the Mediterranean. Except for these the canal country is monotonous with vineyards protected by windbreaks of tamarack and reeds. Every available spot has its vine. At Les Onglous the canal proper ends, and canal boats are towed for about twelve kilometers across the Etang de Thau into the city of Cette. The Mountain of Cette stands out in that flat country as Big Blue hill does near Boston. It reminds one vaguely of Gibraltar. The main streets all go uphill, and you have views constantly out on the Mediterranean. Connected with the mainland only by a strip of sand, it could easily become an island. Across the outlet of the Etang de Thau is the town of Frontignan, famous for its wines even in a wine country.

The port of Cette is made up of basins and canals and seems to invade all the lower part of the town. This work is all due to the planning and initiative of Riquet fully as much as the canal behind it. He had to have a Mediterranean port, and the Mountain of Cette was a secure post to which he might tie it. At its base he made a canal from the Etang de Thau to the sea, filled in land and constructed basins and breakwaters. The whole harbor is purely artificial, and even today the struggle against nature has to be kept up to keep out the invading sand and to accommodate the ever-increasing commerce from Africa, Spain and Italy.

After a trip on the canal from Toulouse to Cette you can understand why such a piece of engineering passed for a marvel in the seventeenth and eighteenth centuries, and why the great Vauban should have said when he examined the complete work: "I would give all that I have done and all that there remains for me to do, if I might have created this masterpiece." Truly, the canal-makers are among the great men of the earth, and Riquet is not the least among them.

Not Concerned With Conventional Morality

By John J. Encking, Boston, Mass.

Should an artist produce without regard to the moral influence of his work? This question has as many sides as there are intelligent thinkers among men, for it is a question the answer to which depends upon the people, not upon the church or the state.

It is the summing up of the individual opinions of all the people which will raise or lower their standards on any question. The individual should have great freedom to express what he thinks and feels, but the people should exercise their right to assent to or dissent from what the individual creates and expresses.

Good and bad are only relatively so. Morality and immorality are dependent upon each other, the same as light and shade. Light cannot be seen or exist without the dark as a contrast. The positive cannot work without the negative. Good cannot be gauged without the bad. Coarseness and refinement, brutality and spirituality are all interdependent.

These propositions are based on science and no educated person of this generation can refuse to accept them. People readily accept theories, but when it comes to applying them and giving practical illustrations of how they work they are often shocked at the result. It seems as though the people want to be fooled; they do not want the truth.

Years ago the purple pictures by the so-called impressionists, Manet, Monet, Pissarro, Sisley and others, threw the art world into a fever heat because those painters practically illustrated the truth of the prism theory, a great help to serious students; but only sneers and condemnation were the result of their endeavors for a long time.

The individual must be free to act as near as possible from impulse, so that not only will he learn to know himself but also his fellow men. It is the people who must make standards, rules and regulations by which the creations of individuals are judged, but these standards will change from day to day as the intelligence of the people increases or diminishes. Some artists paint potboilers or bad and immoral pictures. The people must compel such artists to bring their work up to the existing standards. But an artist whose aim is lofty, who strives to realize his highest conception of the beautiful, cannot consider for a moment the moral or the immoral, for his activities are on a far higher plane, where there is neither science, nor intellectual speculation, nor analysis, but only sentiment.

Many Difficulties of City Living

By H. A. JEFFREY, Milwaukee, Wis.

When it comes to figuring whether a girl can live on \$6 a week in the city, it is interesting to note the figures recently compiled by the agricultural department regarding the cost of living on the farm. I do not think ordinarily a young girl can live on \$6 a week in the city. Rents are too high and food prices too great, not to speak of the cost of clothing. But on the farm it has been shown that individuals can live on \$180.34 a year, which is little more than \$3.50 a week.

The figures of the department show that in Wisconsin the individual spends \$80 a year for food, \$13 for fuel, \$31 for rent, and \$54 for house labor, with an additional item of \$165 for light or oil.

In other states, it is said, the cost of actual living is less than in Wisconsin. Wisconsin farms ordinarily support 4.2 persons on 86 acres, which makes it necessary for each farm of that size to yield a revenue of \$760 a year. However, a large part of this is for labor, which is supplied by members of the family.

Speaker Clark recently called attention to a speech of former Secretary of Agriculture James Wilson, who said that each acre of ground in the Mississippi valley could support one person for one year, and the speaker, carrying out the illustration, showed that that section of our country alone could take care of 1,250,000,000 people. And we are a nation of perhaps 110,000,000.

It all goes to show that the besetting sin of the American people is extravagance, a weakness that has been continually remarked upon by foreigners.

Few Real Physical Cowards in World

By J. W. SCOTT, Dubuque, Iowa

The great war has demonstrated, if nothing else, that animal courage, the lack of the fear of death or injury under certain circumstances, is the common heritage of men. After seeing the war at first hand, Irvin Cobb is reported to have said that he did not believe there was a coward on earth when man was put to the final acid test, and he probably was approximately right.

What value, then, is a "red badge of courage" if everyone is entitled to wear it? What is there to boast of in animal courage when, in greater or less degree, everyone has it? Manifestly nothing, and yet poets have lauded it and history bows in abasement before it.

That is the trouble with the world and that is the reason why war persists. We have set ourselves up a false standard, and resultant upon it are militarism, navalism and all the false gods upreared by the gonii of destruction.

What we need is the "white badge of courage," the badge denoting the man superior to the ordinary temptations; superior to the sneers of physical cowardice; superior to the taunts of the merely bestial, since real courage, which man shares with most of the beasts, is surely mainly bestial.

In short, we need moral courage, for while there are few real physical cowards in this world, it is full of moral cowards.

Good Homestead Land Still Open

By W. Matson, Benkelman, Neb.

It has always been a mystery to me why so many people who really ought to be in the country will go to a city to live, where the best they can do is to eke out an existence, with no possible hope of ever getting ahead. If these same people would take up a good 160-acre homestead they would be far and away ahead of the game in a very few years.

The first item of saving a man in the country has over the city man is rent. In the city even poor, cramped quarters cost at least \$10 a month. Then his milk, butter, eggs, etc., run into considerably by the end of the month. The country man produces all this, practically without cost.

I have lived out here for twenty-six years, and when I tell you there still are desirable homesteads to be had I know what I am talking about. Even on the poorest one a man can make a living for his family if he has enough capital to buy a few milk cows, some little pigs and a few chickens.

Of course a man has got to roll up his sleeves and go to work, but his efforts will be rewarded, and it beats listening to the tune of a factory whistle.

Powerful Strassburg

THE world has awaited, with dread, the time when the French armies might reach the environs of Strassburg and begin to bombard that ancient capital of Alsace-Lorraine, because then one of the most marvelous works of civilization will be exposed to destruction or great damage. This is the cathedral of Strassburg, an architectural glory, "one of the choicest Gothic visions ever dreamed of by a master mason."

During the war of 1870 the Strassburg cathedral was rather badly damaged. The French established a military signaling station in the immediate vicinity, which drew the shell fire of the Prussians. As a result, the magnificent spire was torn from top to bottom, and one projectile, grazing the cross on the top, bent it sidewise. This happened on the 24th day of August.

No sooner was the war at an end, however, than the Germans set about the business of repairing the damage thus inflicted. The task occupied ten years, being not completed until 1880.

Dates From the Eleventh Century.

It is an interesting fact that this celebrated structure occupied the site of an ancient heathen temple dedicated to Hercules. Indeed, the image of the god is known to have been preserved within its walls, as a historic memorial, up to the year 1865, when it disappeared—just how is not satisfactorily explained. The heathen temple was demolished in the fourth century A. D.

The Christian fane that took its place was of wood in the seventh century; later it was of stone. It was

the houses in narrow streets (dating back to the middle ages) being embellished with wonderful wood carving. The city is connected with the Rhine (two miles to the east) by canals. It is a center of high roads between Germany, France and Switzerland and at the junction of other canals which connect the Rhine with the Marne, and the Rhone with the Rhine. The place is the seat of the imperial governor of Alsace-Lorraine, and the headquarters of the Fifteenth corps.

Like Metz, Strassburg was in former days governed by a prince-bishop. But in the thirteenth century the then German emperor made it a free city. It had at that time 50,000 inhabitants—a population deemed huge—and, being a very important trade center, it was already rich and prosperous. Then it was that the principal facade of the great cathedral was built.

One of Town's Features.

Strassburg, like Metz, was an ancient Roman military post. The Romans called it Argentoratum. It is today enormously strong, being defended by 14 forts and inner ramparts. There are also great works for flooding the approaches, as an additional discouragement to an enemy.

An interesting feature of Strassburg is the great number of storks which build their huge nests on the chimney pots. Oddly enough, these birds never seem to establish themselves for breeding purposes anywhere except on human dwellings. Nobody would ever think of disturbing them in any way. On the contrary, a householder thinks it a great sign of good luck if a stork picks out his roof top



GUTENBERG PLATZ

partly or wholly burned half a dozen times (destroyed by lightning in 1002), and as often rebuilt. As it stands today, it was completed in 1839; but the oldest portion dates from the beginning of the eleventh century. It is considered the noblest creation of ecclesiastical architecture in Germany, its only rival in that country being the equally famous cathedral of Cologne.

The astronomical clock which adorns this cathedral is the most celebrated timepiece in the world. It dates back to 1352, and originally was graced with statues of the three wise men and the virgin in wood, together with a cock. At the stroke of every hour the wise men bowed before the virgin and the cock crowned and flapped his wings.

It contains a perpetual calendar, indicating all the various holy days (movable feasts), such as Easter, and regulates itself in leap years. It shows the movements of the planets, the phases of the moon and eclipses of the sun and moon calculated for remotest times. Figures representing the four stages of life, grouped around a figure of Death, strike the quarter hours. Childhood strikes the first quarter, Youth the second, Manhood the third and Old Age the fourth. Death strikes the hours, while an angel, seated above, turns round an hour glass which he holds in his hand.

At stroke of 12 the apostles appear in single file and pass before a figure of Christ, bowing. The Savior blesses them by raising his hand, while the cock crows and flaps his wings three times.

Strassburg Once a Free City.

Strassburg marks the locality where the River Ill divides into five branches. It has 125,000 inhabitants, and the old part of the town is most interesting to the sightseer, some of

for a nest. It is very curious to see them teach their young to fly.

Toward the end of August all the storks start on the same day southward, bound for their winter quarters in Africa. In March they return, preceded a week or so by a single stork pioneer, and their arrival is always hailed with joy. Apparently they invariably take up the same nests year after year.

Outdoor Living.

Living much out of doors, in the sun and wind, will no doubt produce a certain roughness of character—will cause a thicker cuticle to grow over some of the finer qualities of our nature, as on the face and hands. So staying in the house, on the other hand, may produce a softness and smoothness, not to say thinness of skin, accompanied by an increasing sensibility to certain impressions. Perhaps we should be more susceptible to some influences important to our intellectual and moral growth if the sun had shone and the wind blown on us a little less; and no doubt it is a nice matter to proportion rightly the thick and thin skin. But methinks that is a surfeit that will fall off fast enough—that the natural remedy is to be found in the proportion which the night bears to the day, the winter to the summer, thought to experience.—Thoreau.

British Schoolteachers.

There are in England and Wales 41,835 male elementary schoolmasters including the certificated, the uncertificated, and the student teachers. Of these there were 4,000 certificated men with the colors at the end of September, and there are now well over 5,000, or 12½ per cent of the men under thirty-five and of the fit men, perhaps as much as 40 per cent.