

BRITISH NAVY'S PART IN WAR

DECISIVE FACTOR IN SUCCESS OF THE ALLIES

Keeping the Ocean Routes—Gradual Destruction of the German Menace—Role of Foe Fleet.

There is an elbow of road above the Fifth of Forth from which the land slopes steeply and the kindly landscape of Scotland is suddenly superseded by that wide floor of grey water and the straddle of the vast bridge and, if one should come to it in a fortunate hour, by such a vision of the apparatus of sea power, the machinery of Admiralty, as only Britain, in this time of her destiny, can display.

It is the Grand Fleet, the hammer-head of that vast navy which alone has made war possible and victory sure for the Allies. Mile after mile of great and little fighting ships; they lie folded away between low green capes of pasture, close neighbors to the domesticity of the villages, a visible and plain token of that part which every inhabitant of these islands and of this Empire possesses in the suzerainty of the seas. Their bugles sound faintly across the water, the quiet cresting of their masts and funnels over the pastures; it is as though they spoke in reassurance to the quiet secure land which they alone safeguard and maintain.

Ceaseless Activity.

When the air is ringing daily with news of victories on land it may seem an inappropriate time for a survey of the naval situation. The reverse is true. Never was there a moment when the public more owed to itself the duty of realizing how much of all that has recently happened is owing to the vigilance and the power of the British Navy. Not only is command of the sea an essential to the Allied cause as the atmosphere is to life. The special effort of the last six months, now beginning to yield its harvest, would have been impossible but for the exertions of the British mercantile marine in conveying, in numbers that would seem incredible if they had not been realized, reinforcements across the English Channel and the Atlantic, and but for the success with which the British Navy has protected the transports from enemy submarines. Six months ago the situation seemed to hold no better prospect for the Allies than a prolonged defensive against heavy odds. To-day, thanks to the naval effort, the balance has been redressed with a completeness that few dared anticipate, and is hourly increasing against Germany. Six months ago the Allies would have been glad to be assured of safety by the end of the year. To-day they have victory in sight. For that change they are, as they know, indebted to the Navy, without which their courage would have been in vain.

On the submarine issue in the main the naval struggle of the last twelve months has turned. Since the Battle of Jutland the German High Seas Fleet has not ventured into the North Sea. It has been content with an occasional cruise in the Baltic. The role of the German Fleet has been the ground and the sound one of keeping the gate open for the submarines. Consequently, the function of the British Grand Fleet has been one of vigilant defence, for there is no method known to responsible naval strategists of forcing out of fortified harbors a fleet which has determined to remain there. But it has not been a passive defence.

Course of Submarine War.

Not a day passes but some units of the Grand Fleet, and on occasion the Fleet as a whole, have been in the North Sea. From the air, on the surface, and under the water its auxiliaries search the Heligoland Bight and the enemy coast for signs of activity. Mines have been swept up almost under the muzzles of the enemy guns, and British mines have been laid by the thousands. Even that ceaseless activity could not prevent such incidents as the raids on the Scandinavian convoy, on the fishing boats off the Tyne, or on the Dover patrol, or the attempt to bombard Dunkirk railway junctions last March. Any night a few German cruisers may, under cover of darkness, make a hurried dash on the East Coast. But these enterprises have become rarer, and they are not likely to increase. They are more dangerous than they were, and if the German Admiralty were candid it would have to admit that the British Admiralty has not chosen to announce—the loss of well over a hundred surface vessels in and around the Bight of Heligoland during the last twelve months.

In its main aspects the course of submarine warfare has been revealed to the public in the speeches of Lloyd George and the First Lord of the Admiralty. The Germans have denied the Admiralty claim to have sunk at least 150 submarines. The rejoinder is made in the form of a list of 150 submarine commanders who have been killed, captured or interned. That the list will be reproduced in enemy countries is unlikely. The Germans cannot afford to give their people so conclusive an opportunity of testing the relative veracity of the British Government and of their own.

During the year the race between

the production and the destruction of enemy submarines has pursued a varying course, depending on the one hand upon the fluctuations of the German output, and upon the other on the demands made upon the British naval activities in other spheres, notably in the protection of Transatlantic convoys. On the whole, however, it can be said that the Navy has kept pace with the German shippers, and as protective duties diminish or are shared by the Allies, the actual reduction of the enemy submarine fleet will be resumed.

The Allied Fleets.

It will be noted that throughout we have referred to the British Navy only. This has been due, not to any lack of appreciation of the assistance of the Allied Fleets, but to the fact that almost the whole additional burden imposed by war has fallen upon Britain. France, Italy, Greece and Japan have fleets of practically the same strength as those with which they started the war. The effort of the United States, great as it has been, is only now beginning to bear fruit. It placed its available resources unreservedly at the disposal of the Allies, but even so its proportion of the total naval strength in British waters is about three per cent, and in the Mediterranean about six per cent. There is a prospect that in the near future the burden will be lightened.

The British Navy can survey its past share in the war with pride and its future with confidence.

NAVY "GHOSTS"

A Noise Which Cannot Be Accounted For is Naval Definition.

The first lieutenant has just been relieved, writes "I. S. T." in the London Daily Mail, and was wending his way from the destroyer's bridge to his cabin. It was fairly calm but very dark, and there was little to be seen but a line of waves on each side and the dim form of a second destroyer in station astern. Even for this "No. 1" had no eyes, for he had a heavy middle watch and bed was his only interest. But he did notice a weird figure, apparently human, crawling about near the "bandstand" of the attack gun.

He went to investigate and found the surgeon probationer, clad in a chequer leather overall suit, in which he had been sleeping on the wardroom couch below. For everyone must sleep more or less clad, ready to turn out at a moment's notice. He was feeling about in the dark, apparently in search of something.

"What on earth are you doing, Doc?" he asked, and got the brief answer, "Laying a ghost." The first lieutenant granted and disappeared below, leaving the doctor to insert a paper wedge between a rattling shell and the side of the stand in which it was placed.

A ghost, in naval language, is a noise which cannot be accounted for. In a destroyer one becomes a connoisseur in noises. The steering gear clanks heavily at intervals and the rhythmic beat of the engines is always there, changing only when the speed is altered. In heavy weather the washing and beating of the waters make a hundred noises, and if the full force of a wave suddenly breaks on the ship's side it gives a sickening thud, which may bring you bounding from your bed—for you never know what may have happened.

STRANGE GREEK FUNERALS

Boy Carrying Coffin Lid Always Heads a Funeral Cortege.

There are queer customs connected with funerals in Greece. At the head of the procession walks a boy carrying the lid of a coffin, which is decorated with purple garlands and flowers. Then, after a numerous company bearing banners and candles walks the priest, and after him is carried the open coffin.

The body is dressed as for a festival. Civilians are dressed for burial in black clothes and white gloves, officers of the army and navy in full dress uniform, and ladies in white silk and flowers.

Three years after the burial the bones are dug up, washed in wine, and preserved in sacks in the ossuary or bone-house. Rows of these queer sacks can be seen in the cemetery at Athens, and they are all numbered and registered for identification. The bones of the poor are thrown into many different local customs connected with burial. Almost everywhere a pitcher is broken on the threshold when the funeral leaves the house. In Corfu the house is not swept for three days after the funeral, and when it has once more been swept the broom is burned. Elsewhere all fires and lights are put out and not relit for a week, so there can be no cooking, and at the funeral feasts the guests bring their own prepared food.

Musical instruments composed principally of wood suffer more from the climate of India than any other wooden structures.

THE BRITISH CHANNEL FERRY

REASONS WHY IT IS DIFFICULT TO OPERATE

Tunnel Project is Only Effectual Way of Connecting British Railway System With Continent.

Sir Arthur Fell, M.P., in an article on "The Channel Ferry," published in the London Daily Graphic, asks: "Does it dispense with the tunnel project?" and says:

The government has permitted the statement to appear that a Channel ferry service is now in operation between England and France. A ferry-service means that railway carriages and wagons can now be run directly from the railway lines onto rails on steamships and be conveyed across the Channel and run out onto the railway lines in France. By this means passengers can cross the Channel without leaving the carriage, and goods without breaking bulk. The question is raised whether this solves the problem of communication with France and if the Channel tunnel is still necessary for the future trade and prosperity of this country.

The War Office has not published any details of this Channel ferry service, and whatever may be known by individuals, the matter can only be discussed generally from the knowledge we have of railway ferries in operation, and which are well known to travellers. There are such ferries in the Baltic, from Germany to Denmark; in the Mediterranean, and on the Great Lakes. These ferries are running successfully, and that across the Straits of Messina, uniting Sicily with Italy, has proved a great benefit to the country, and has enabled the oranges and lemons of that country to be exported at a profit to Italy and to Central Europe.

High Tide in Dover Straits.

These railway ferries have, however, little in common with a ferry about the Straits of Dover. They all run in seas where there are no tides, and as the rise and fall of the tides at Dover and Calais is about twenty feet, it is clear that to run heavy trains onto ships at either of these ports presents difficulties which do not exist in the Mediterranean ferries. The passenger casually notes that on alighting from the train at Dover he sometimes has to clamber up a gangway to the deck of a steamboat, while at other times he descends a steep gangway onto a deck far below him. In the Mediterranean or Baltic the steamboat's deck would never be more than six inches or a foot above or below the railway line.

This difficulty can be overcome by engineers, but it costs money and occasions delay, and the public will be glad to learn how far and by what means the government has solved it. If the ferry service is tidal and the hour of departure varies each day with the tide, then the value of the service is much diminished. This may not be of so much importance with goods trains, but it would be fatal to an effective passenger or mail service to the Continent, and even trains conveying fruits, flowers and other perishable goods would lose the value of those which arrived at fixed hours to catch the morning markets.

Difficulties of Ferry Passage.

Another difficulty for an effective ferry across the Channel is the stormy and foggy sea to be traversed. The present service of mail boats is only conducted with the greatest difficulty during the winter gales and the fogs. Small handy steamboats are then only run, and they make the French harbours with considerable risk. How far ferries are capable of carrying a train of heavy sleeping and dining cars could cross in bad weather remains to be seen. The French harbours are so small, and the English also, with the exception of Dover, that ocean-going steamships could not be used unless an immense outlay were incurred in creating a new port in France, and the time and risk of building breakwaters is such as to be an almost insuperable obstacle, for they would cost millions of money and take many years' time, and in the end when the tunnel is built, it will all have been money thrown away.

The last and greatest difficulty is, however, the fact that a Channel ferry will have no effect on the painful bugbear of seasickness. That is the real deterrent to foreigners visiting this island. They will not make the sea voyage here when they can travel to other lands without discomfort. The ferry steamboats with the trains on board will pitch and roll as the present ones do, and seasickness will be just as rife among the passengers in a railway carriage which rises and falls as among those on the deck or in the cabins of a steamboat. To continue in a railway carriage under such conditions, or to travel afterward in it to Paris or Switzerland, is unthinkable. The ferryboats, however, will have cabins, and the passengers will alight and alight in them or on deck during the passage.

Tunnel is a Necessity.

The only benefit passengers will derive from a ferry service will be the saving of the trouble of leaving the train with the hand baggage and walking on the steamers, and the same on the arrival at the other side. For goods traffic it will be a great

help, and it will partly meet the Italian demand for improved facilities if they are to trade with us instead of with the Central Powers.

London will never be the railroad centre of Europe and the terminus of the great express service to the European capitals, unless the trains can run throughout on railways, and not have to be delayed and broken up for sea voyage an hour after they have started from London.

These seem to be some of the reasons why a Channel ferry can at best be no more than a stopgap or substitute for the link which is necessary to connect the British railway system with that of the Continent. The military side of the question is not referred to; but it is obvious that ferry steamers will in war be liable to attack by warships and submarines, and the safety of the tunnel cannot be noted that it would require a fleet of more than one hundred ferry boats to carry the trains which could pass through the tunnel in a day.

BUDDHIST'S HOLY SPOT

Hermit's Shrine Located on Top of Swaying Boulder.

Sightseeing in Burma is apt to be one pagoda after another, and that the tourist misses most of them. One that he especially does not see unless he is especially energetic, or has an insatiable taste for pagodas, is the Kyauk-ho-yo pagoda, one of the most holy spots in Burma in the eyes of the Buddhist Burmese.

The Burmese say that the builder of the pagoda was a hermit, a theory which seems probable enough, for it is built on the top of a steep hill in a location which could appeal only to one of solitary inclination. Even the crest of the hill must have been too close to the world for the holy man, for he located his shrine on a huge boulder, which may have been steady enough in his day, but which is now seen ready at any time to slip off into the valley several thousand feet below.

Assured by the Burmese guide that the rock has rested at this critical angle for many centuries, the visitor, almost breathless from the reckless ascent of a Burmese hill, climbs a swaying bamboo ladder to view better the old pagoda. The great rock, with its shrine forming a tiny pointed cap, seems even more unsteady from here, but the guide feels no uneasiness. He is confident that somewhere below the pagoda is a lock of Buddha's hair, and this alone stays the boulder from its fall.

GIBRALTAR STRAITS TUNNEL

With Dover Tunnel It Would Link England With South Africa.

Interest has lately revived in the scheme for a tunnel beneath the Straits of Gibraltar, which has, like that for a railway link between England and France, made an appeal to engineers for a generation or more. Some of the technical aspects of the project have been under discussion before the French Society of Civil Engineers, and it does not appear to be thought that there are any abnormal difficulties on the engineering side. Owing to the depth of water and character of the sea bed and the underlying strata, it would be necessary to construct such a tunnel at a depth, it is believed, of some 340 metres; and the length between Tarifa, the suggested point of departure on the Spanish side of the Straits, and either of the alternative points of departure on the Moroccan coast, would be about 15 1/2 miles.

It is assumed by the advocates of the scheme that the cost of construction would not exceed £10,000,000, but necessary port improvements would call for an additional £4,000,000. There can be no doubt that the linking of the European and African railway systems would give a great stimulus to French and Spanish trade and on the assumption that the tunnel beneath the Straits of Dover is constructed, the tunnel would provide through route between England and South Africa.

The scheme now put forward by M. Henri Bressier does not differ in its essentials from that planned by Berlioz twenty years ago; but it is felt that the case for the tunnel has been strengthened in the interval, and it is believed that the capital could now be found without seeking any financial aid from either the French or Spanish Governments.

The Dead to the Living.

O you that still have rain and sun, Kisses of children and of wife, And the good earth to tread upon, And the more sweetness that is life, Forget us not, who gave all these For something dearer and for you! Think in what cause we crossed the sea! Remember, he who fails the challenge Falls us, too.

Now in the hour that shows the strong—

The soul no evil powers affray— Drive straight against embattled Wrong: Faith knows but one, the hardest way. Endure; the end is worth the throes, Give, give, and dare, and dare again dare! On, to that Wrong's great overthrow! We are with you, of you; we the pain and Victory share.

Japan has been added to the countries using motion pictures for educational purposes.

BATTLEFIELD LINGO

Some War Words That Will Have a Permanent Place in Our Language.

The English language is a very "elastic" one, and ever receptive of new words and phrases, says an English writer. At the present time it is getting saturated with terms of military, French and American origin in particular. The use of an expressive word has indeed become "a work of national importance." This term itself is one of the best evolved in the present crisis, and its powerful, unmistakable meaning has affected us all.

"Going West" is another which has a profound and poignant significance. Its origin is doubtless from "somewhere in North America," and its peculiar applicability is seen as one thinks of the sun sinking to its rest at eventide behind some of the eternal hills. "According to plan" is a military idiom which has been frequently used of late, and has much significance.

Among the phrases which have come to stay is that striking French one: "Il ne passera pas" (They shall not pass). It tells of grit and perseverance on the part of brave men against fearful odds, and will ever be an inspiration to future generations.

Much discussion has taken place recently over the meanings of words "decimus" and "offal." The first word is frequently used by war correspondents to express great slaughter, but really it only means one in ten, being derived from the Latin "decimus," a tenth. "Offal," again, has a very displeasing sound to most ears, as meaning just refuse. But if we divide the word into its parts—"off" and "fall,"—it loses its offensive quality, and denotes simply good waste meat.

The use of the words "fly" and "flee" in our war journalism has also been confusing to some. "Fly" means to move with wings, while "flee" is a general term, and denotes moving with rapidity. In speaking of the Kaiser and his people's conduct, how many of us make any discrimination between the words "crime," "sin," and "vice." Yet each have quite different meanings.

Our old, well-worn friends, "Highly" and "camouflage," hardly need reference, but the first named is doubtless derived from "Hind," the Hindu word for home, and brought to this country by our soldiers from overseas. "Camouflage" is a French expression, meaning literally, "to blow smoke into another's eyes,"—therefore a very effective temporary "blind."

LITTLE DEEDS OF MERCY

Of Many Beneficent Acts May Be Mentioned That of Englishwomen.

There was a time when people were fond of teaching their children a certain little song about "Little deeds of kindness, little words of love"—It must be that those children are the men and women of to-day who are, literally, going about the world doing deeds of mercy instead of singing about them. For it is a fact that every deed of frightfulness to-day is matched by thousands of deeds of touching kindness and mercy. The best verses of that simple little song are being set to music that sings itself into the hearts of those who needed the kindness more than anything else in this world. Because the workers are so sincere few persons know of their song.

However, it happens that two English women, sisters, have been doing a work for which, no doubt, many a Canadian woman will bless them. When Belgian refugees began pouring into England these two sisters, the Misses Tebbutt, began distributing chocolate and cigarettes to Belgian soldiers who landed at the docks of Southampton. It was not long before a hospital ship arrived bringing British wounded. Ever since that day, these two girls, unaided, have met every hospital ship (with very few exceptions) and have given to each soldier and officer this thoughtful little greeting. They wear no uniform and are the only women on the berth. They never get in the way and always manage to greet all the men. Considering that one sister has to do a whole ship alone when two ships happen to dock at the same time it is easy to see that their self-imposed mission is not an easy one.

Special boxes have been made carrying several kinds of cigarettes and chocolates and fastened to this is a pouch with many pockets holding post cards, pencils, matches and newspapers. At first the entire cost was borne by these splendid girls and their friends but now the plain chocolate and cigarettes are from a fund collected in the town, while the milk chocolate, post cards, pencils, etc., are still the contribution of the sisters.

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U.S. TROOPS USE CAMOUFLAGE

ENEMY MYSTIFIED BY YANKEE TREES

Steel Cores in Make-Believe Forest Conceal Hidden Observers Who Watch the Foe.

A make-believe forest stands along the edge of the road at the entrance to the American camouflage station here. It looks as natural as the real woods along the fighting front, with the shiny silver bark of the beeches, the rough, jagged trunks of the old apple trees, and the sprouting tops of the dwarf willows, says a war correspondent.

Yet every tree in the camouflage forest has a steel core within which an observer peers forth to watch the movements of an enemy or a machine gun is located to sweep forth from its hidden recess. They are only one of the many strange devices to deceive and mystify the enemy which this camouflage station is sending forth to the army.

Camouflage is one of the distinctly new products of the war, even in the name, which was used for the first time by General de Castelnau, Chief of Staff of General Joffre. The word is not good French, but comes from the argot, or French slang, the verb "camoufler"—being used by French poets to indicate any disguise used to capture criminals. For example, a detective camouflages himself by dressing as a coachman.

Follow Allies' Methods.

Early in the war the famous portrait painter, Giron de Sivele, conceived the idea of disguising batteries and buildings by painting them in fantastic patterns blending with the landscape. He laid the plan before General de Castelnau, who, struck with the practical value of the plan, exclaimed "Camouflage." And from that time the word grew and with it grew in a tremendous magnitude this art of misleading the enemy.

The American army has been making full use of the strange new weapon of warfare and the camouflage plan is one of the most complete in existence with a working force of nearly one thousand and a staff including many of the well-known mural artists and decorators and sculptors of America, all of them engaged in producing these curious devices by which military art deceives the enemy.

But there must be something more than stage properties in the productions of these artists. They must be practical and suited to the uses of warfare, and it is the part of Colonel Bannion, head of the camouflage station, to keep these artistic productions within practical limits.

NAME FOR TANKS

They Were Rivetted Up Near Front Line But Hidden From Men.

Just how the armored tractors, used for the first time by the British against the Huns, were given the name "tanks" is told by Horace Gaul, a veteran of the war. "I was sent across with Canadian troops shortly after the outbreak of the war," said Mr. Gaul, "as a member of the Eighth Battalion, First Division, the 'Little Black Devils.' In the front lines we used to get our supply of water from small tanks conveyed from the purifying plants to the trenches by motor cars. In a few months we began to hear the sound of rivets being driven. This went on day and night for months, and when we asked what they were making they told us 'tanks.' For a year this went on, and we began to think they must have had enough tanks made to carry all the water in the world.

"One day there came a huge, lumbering steel fortress on wheels. It went right across No Man's Land and 'cleared' up a party of Huns. Right then and there they were christened 'tanks' by the men, and that name has stuck to them ever since."

Food Situation in Italy.

In order to meet the enormous army demands for meat in Italy, the slaughter of cattle for the civilian supply has had to be reduced from the pre-war consumption of 70 grammes a day per person to 6 grammes a day. The extreme shortage of beef has reacted on the consumption of substitutes so that there is now a very great demand for these, especially fish of all kinds and pork. There has also been a diminution of over 50 per cent. in the production of milk, butter and cheese. Another argument for more Canadian girls going in for dairying.

Oldest Timber in the World.

What is described as the oldest timber in the world which has been used by man is found in an ancient temple of Egypt. This timber is used in connection with stone work, which is known to be more than 4,000 years old. This wood—and the only wood employed in the construction of the temple—is in the form of ties which hold the end of one stone to another. The ties appear to be tamarisk, of which the ark was constructed.

HEROIC CONDUCT OF CANADA'S SONS

TURN DEFEAT INTO VICTORY BY DARING DEEDS

Some Examples of the Magnificent Bravery and Inspiring Leadership of Dominion Soldiers.

Here are more tales of personal heroism during the battle of Cambrai:

A Lieutenant of a Nova Scotia regiment, finding the advance of his brigade held up by heavy machine gun fire on both flanks and the thick, uncut wire still before the enemy trenches, crawled forward alone through a hail of fire. He found a small gap and through this he led his men, organizing bombing parties. The enemy counter-attacked in force, and, running short of bombs, the company found itself in a critical situation. Although wounded in the head, the Lieutenant went back alone to our attacking line, and going from company to company, gathered a supply of bombs. He received a slight wound in the side during the trip. On his return he found but a mere handful of men, but immediately organized them and then started bombing the enemy out of his defence system, which here consisted of numerous small detached trenches, a few feet long. He was, therefore, obliged to emerge over the top from one to another, but succeeded in clearing the system himself, killing eleven and taking twenty-five prisoners. He steadfastly refused to be evacuated, remaining with the company for two days, until badly wounded in the back and gassed, when he was ordered out by senior officers. He made his report and then collapsed, having been sustained only by his passionate devotion to duty.

Relieved at Critical Juncture.

In the same battle a Captain of a light infantry regiment assumed command of a battalion when the senior officers became casualties. At Tilloy, on September 30, when three companies on the left were being disorganized, and were even beginning to withdraw from positions so hardily won, he went forward, rallying men at this critical juncture and succeeded in penetrating to their objective. By his cheerfulness and unflagging energy and utter disregard of danger, he so inspired all ranks that they willingly followed him through a most intense shell and machine gun fire. It was entirely due to his magnificent work that part of Tilloy, which was of critical strategic importance, remained in our hands on that day.

A Captain of a mounted rifle battalion when his men were being decimated by machine gun fire, although wounded, dashed forward alone into an enemy machine gun nest, and armed only with rifle and bayonet, killed four and took eight prisoners. He gathered his men together and under a withering fire organized a party to fill in the gap on the flank and reinforce the troops attacking Tilloy. Hearing that the Commanders of two other companies advancing on his right were casualties, and seeing that the stubborn resistance of the enemy was holding up the entire line, he undertook, amid a storm of fire, the reorganization of these platoons, and, taking command of our leading waves, continued to advance. His magnificent bravery and heroic leadership turned an imminent defeat into victory.

DYES OF EARLIER DYES

Were Obtained From Natural Objects, as Plants and Insects.

What did people do for dyes before the days of coal-tar derivatives? Dr. Louis J. Matos says that dyes were accustomed to rely upon the indigo plant for blue, madder root for a brilliant pink (Turkey) red, saffron for yellow, supplemented by logwood, Brazil wood, "lac," buckthorn berries and "kermes" for crimson. There were other kinds of tropical woods and barks; also tumeric (a plant of the ginger family) for yellow, and, by no means to be forgotten, cochineal.

Cochineal, lac and kermes were (and are to-day) derived from tiny insects—the first named being commonly propagated on a species of cactus, their natural food plant, cultivated for the purpose. From the woods were derived reds and browns mostly. They were ground or rasped to a powder and sold in this shape to the dyers, who boiled them to get the colors, the infusions thus obtained being called "liquors."

Those were days when the art of dyeing held many secrets that were handed down from father to son, with valuable recipes for coloring wool, cotton and silk. When the war brought a famine of coal-tar dyes, the dyers fell back on the old-time colors, which fetched fancy prices for a while. But, unfortunately, they did not know how to use them. The ancient recipes were lost and the craftsmen who understood them were long dead.

No artificial dye quite equals indigo for blue or madder for red. The same is true of logwood for black. To-day logwood is the standard against which artificial blacks are judged.