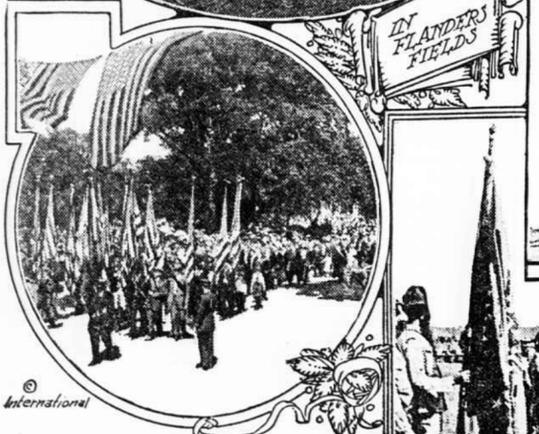
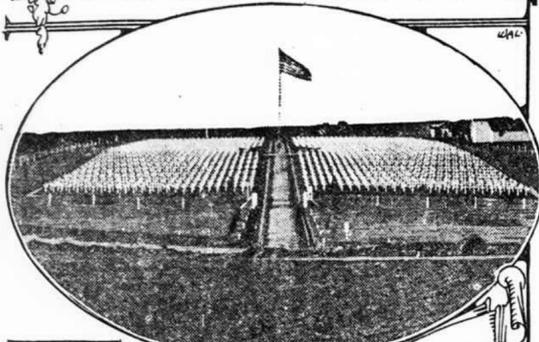
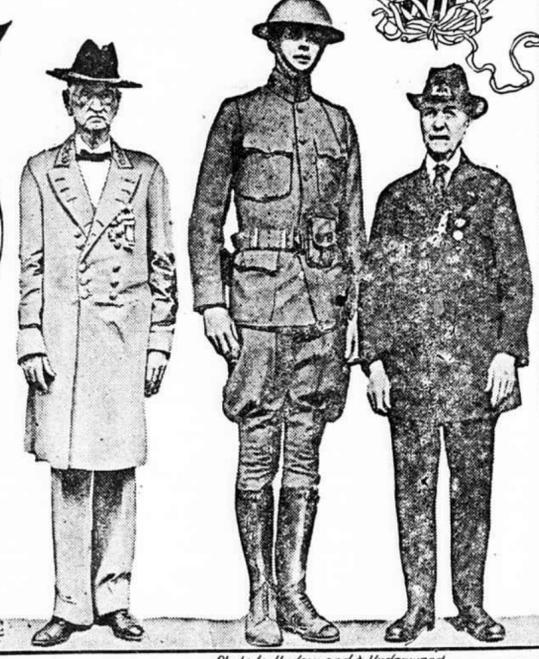
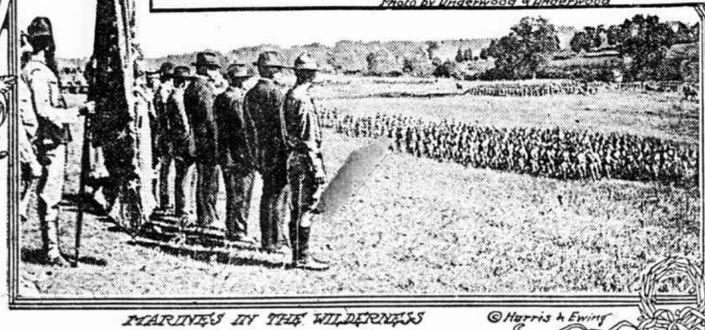


INDEPENDENCE DAY-1922



IN FLANDERS FIELDS



MARINES IN THE WILDERNESS

THE FLAG GOES BY
Hats off!
Along the street there comes
A blare of bugles, a ruffle of drums,
A flash of color beneath the sky:
Hats off!
The Flag is passing by!

Blue and white and crimson it shines
Over the steel-tipped, ordered lines.
Hats off!
The Colors before us fly;
But more than the Flag is passing by!

Hats off!
Along the street there comes
A blare of bugles, a ruffle of drums,
And loyal hearts are beating high:
Hats off!
The Flag is passing by!

By JOHN DICKINSON SHERMAN

INDEPENDENCE DAY is the American holiday devoted to the celebration of the Declaration of Independence in 1776. Of course, but that was nearly 150 years ago. Since then we have had five wars. Since then we have grown from a nation of about three millions to a nation of about 120 millions. So the American people may fitly celebrate more on the Fourth of July than the Declaration of Independence.

Doubtless the Fourth will be observed in this year of A. D. 1922 in a multitude of ways, some good, some bad, some indifferent—necessarily so in a country so big, with so vast a melting-pot population.

We Americans have an attractive list of holidays. Christmas, New Year's and Easter share with all mankind. Thanksgiving Day, Mother's Day and Arbor Day are our own. So are Washington's Birthday and Lincoln's Birthday and Flag Day. Memorial Day is the day the nation grieves over its soldier dead and pays tribute to its fighting heroes at their last resting place.

The Fourth of July should be different from all our other national holidays. It should have something of Washington and Lincoln's Birthdays in it, much of Thanksgiving Day and more of Flag Day.

The Fourth of July should be most of all, as many good Americans see it, a day of nation worship, unstinted and unashamed.

The Government of the United States of America secured its existence through war. Every generation of Americans has had its war. As one generation of fighting heroes passes away another rises to take its place. Some have gone, others are going, all will go. None should be forgotten, for their deeds are the basis of the tradition around which our nationalism is built. The heritage of the next generation has been made possible by their heroism.

There are those Americans who profess to see in the American nation a peace-loving people, slow to wrath and averse to war. It is true that we are slow to take up arms. This is because war with us is a war, not of a professional army, but of the people. Our people go slow to war because they will not fight unless the provocation is great and the cause is just.

But those who believe America is not a fighting nation are utterly and entirely wrong. We are not afraid to fight. We know how to fight. As a matter of exact fact we are the most warlike people on earth. When America goes to war the national heart goes with her soldiers. We are the most desperate in battle.

The Flag has waved over our battle-fields for a century and a half. Never has it trailed in defeat.

All of America's wars have been in the cause of

humanity. America has cause to blush for none, to apologize for none, to feel regret for none. So why should not the Fourth of July be in part devoted to nation-worship and to remembrance of the deeds of the heroes who kept the Flag victorious from the Philippines to France! In an appreciation of our national history it is not necessary to acclaim war or to deify the fighting man. Hand in hand with appreciation of America's valor in war go an appreciation of the evils of war and an appreciation of the lessons of war.

The Fourth of July is surely the day of days on which to salute the Flag, remember the heroes who have died for it, applaud the living who have fought for it and declare again, with the poet:

In spite of rock and tempest's roar,
In spite of false lights on the shore,
Sail on, nor fear to breast the sea;
Our hearts and hopes are all with thee;
Our hearts, our hopes, our prayers, our tears,
Our faith triumphant o'er our fears,
Are all with thee, and all with thee.

So first a thought of reverent praise for the five immortals who drew up the Declaration of Independence—Jefferson, John Adams, Franklin, Sherman and Livingston. And then a thought of the many heroes of '76, from the villagers who fired the first shot at Concord to Washington, the leader of our armies, not forgetting such leaders as Marlon and Wayne and Stark and John Paul Jones, or such patriots as the three million whom Major Andre's gold could not corrupt; Hale, the martyr, and Molly Pitcher, the heroine of Monmouth.

Next, remembrance for Hull, Brainbridge and Deatur and the Constitution and United States—they bent the "Mistress of the Seas" at her own game, put the American navy on the Seven Seas and kept the Flag flying. The War of 1812 was won on the ocean. And don't forget Jackson at New Orleans—he won for the United States the mouth of the Mississippi. None of the 1812 heroes is now alive; 49 of their widows still live.

In 1846 once more the bugle blares and the drum beats—this time against Mexico. Have a thought for Scott and Taylor—and Kearny and the heroes who fought their way from Vera Cruz to Chapultepec. Of these heroes 73 still live. All honor to them!

The foe himself recoiled aghast,
When, striking where he strongest lay,
We swooped his flanking batteries past,
And having laid their murderous blast,
Stormed home the towers of Monterey.
We were not many—we who pressed
But who of us have not confessed
Beside the brave who fell that day:
He'd rather share their warrior rest,
Than not have been at Monterey?

And then came real fighting—American against American! Christendom stood astounded at the vigor of the struggle and the spirit of the combatants. But that is over now.

No more shall the war cry sever,
Or the winding rivers be red;
They banish our anger forever
When they hurl their graves of our dead:
Under the sod and the dew,
Waiting the judgment day,
Love and tears for the Blue,
Tears and love for the Gray.

A statue of Stonewall Jackson was recently unveiled at Charlottesville, Va. Senator Pat Harrison of Mississippi, the orator of the day, said in part:

"A nation torn by fratricidal strife, when reunited, is, like welded iron, given increased strength and durability.

"From the gulf that separated the sections in sixty-one has come an understanding making for the progress of each and the common welfare of both. This could not have been but for the courage, conviction, and ideals of a whole people.

"The sharp battles revealed in its leaders military genius unsurpassed, and in its men and women courage and fortitude that reflected credit on

both sections and left a priceless legacy to a great and united country.

"The men who filled the ranks of the northern armies were prompted by a conception of duty no greater than those who fought under the Stars and Bars. Glorious victories or crushing defeats dim not the bravery and sacrifice of either. When we view those four years of titanic struggle in the light of the present day, either through northern or southern eyes, there is so much glory reflected from both that each merits the greatest praise and has won imperishable renown. It has been the record of these gallant heroes that has inspired and led our sons to victory in every war in which this country has since engaged.

"At San Juan Hill the boys from the South, under Wheeler, charged with those from the North under Roosevelt. On the cactus plains of Mexico the lads in khaki from Virginia marched by the side of those from Vermont. At Belleau Wood, Chateau-Thierry, and Argonne, when civilization trembled in the scales the brave boys from every part of this land, under the folds of the Stars and Stripes and to the tunes of "Dixie" and "Yankee Doodle Dandy," followed Pershing for humanity and their country. And today, it matters not in which war they were engaged, the names of northern and southern heroes illumine the pages of history and are enshrined in the hearts of a common country.

The Blue and the Gray,
In fierce array,
No local hates dissever,
Strike hands once more
From shore to shore,
The North and South forever.

"The stirring sentiment that prompted a few weeks ago those brave marines encamped on the historic fields of the Battle of the Wilderness, who discovered the little graveyard covered with woods and briars, with inclosure down, in which, among unmarked graves, was buried the arm of that gallant hero to whom we today pay tribute, is inspiring. These boys from every part of the country wearing the uniform of the American fighting man, sworn to defend the Flag of a common country, and ready to give their lives for its protection, went immediately to work, cleared the graves, resurrected the fence, and clothed the surroundings with an air of attention and care. It was the American spirit, the spirit of the present-day American soldier, whose heart was thrilled, whose soul was touched, and whose patriotism was aroused when he saw that in this modest way he could pay tribute even to the arm of a true soldier and as daring a leader as ever marched to the tune of martial airs."

The Spanish-American war, though a little war in comparison with the Civil war and the World war, was an important war. It was won by volunteers. It was marked by valor and efficiency on land and sea—at Las Guasimas, San Juan Hill and El Caney, at Santiago and at Manila Bay. It hastened the day for complete reconciliation between the North and the South. It gave us a realization of our vast resources and man power, and it made us a World Power overnight.

And surely we can Fourth-of-July over the record of our fighting men in the World war. No need to call the roll of heroes, either; or to ask "who won the war?" On, th, English and the Irish, and the 'owlin' Scotties, too. The Canucks and Austriees-uns, and the 'airy French poliu. The only things that bothered us, a year before we knew, was 'ow in 'ell the Yanks'd look, an' 'ot in 'ell they'd do.

My word, it 'appened sudden 'en the drive 'ad first begun.

We seen the Yanks a-runnin'—Gaw Blimy, how they run!

But the only thing that bothered us that seen the chase begin, was 'ow in 'ell to stop 'em 'fore they got into Berlin.

admits of exceptions can never be self-evident. As it was put forth in that time, it was sure to make the circuit of the world, passing everywhere through the despotic countries of Europe; and the astonished nations, as they read that all men are created equal, started out of their lethargy like those who have been exiles from childhood, when they suddenly hear the dimly remembered accents of their mother tongue.—George Bancroft.

IMPROVED UNIFORM INTERNATIONAL

Sunday School Lesson

(By REV. P. B. FITZWATER, D. D., Teacher of English Bible in the Moody Bible Institute of Chicago.)
Copyright, 1922, Western Newspaper Union

LESSON FOR JULY 2

EZEKIEL, THE WATCHMAN OF ISRAEL

LESSON TEXT—Ezekiel 2:1-3:21.
GOLDEN TEXT—Seek ye the Lord while He may be found; call ye upon Him while He is near, let the wicked forsake his way, and the unrighteous man his thoughts; and let him return unto the Lord, and He will have mercy upon him, and to our God, for He will abundantly pardon.—Isa. 55:6-7.

REFERENCE MATERIAL—II Kings 17:33, 14; Isa. 61-63; Jer. 1:1-19; Matt. 23:37-39; Acts 26:18, 20, 27, 29-31.

PRIMARY TOPIC—The Shepherd and His Sheep.

JUNIOR TOPIC—Ezekiel, Watchman and Warnings.

INTERMEDIATE AND SENIOR TOPIC—Facing a Hard Task.

YOUNG PEOPLE AND ADULT TOPIC—The Duty of Warning Others.

I. Ezekiel's Call (v. 1, 2).
1. Commanded to Stand Up (v. 1). Ezekiel was given a vision of the Almighty God on His throne of glory (ch. 1). The purpose of this vision was to give him a synthetic grasp of the execution of the divine will through the powers and forces which he had created. Before the vision the prophet fell prostrate upon his face. The essential equipment of a minister for the discharge of his task is a vision of the Almighty.

2. Filled With the Spirit (v. 2). By the Spirit the divine energy entered him and enabled him to execute the commission given to him.

II. Ezekiel's Commission (vv. 3-8).
1. The Moral Condition of the People (vv. 3, 4). (1) A rebellious nation (v. 3). This rebelliousness perhaps referred to their heathen idolatrous practices. (2) Impudent children (v. 4). "Impudent" literally means "hard of face." It means the grossest perversity which caused them to stand up in the presence of the prophets of God without a sense of guilt or compunction of conscience.

2. The Charge (v. 4). He was to deliver the message of God. He was to declare, "Thus saith the Lord God."

3. The Difficulty of His Task (vv. 5-8). He was to deliver the message of God whether they would hear or forebear. He was thus apprised of the difficulty of his task and warned not to be rebellious as the people had been. Ezekiel was to fearlessly execute his commission, though the attitude of the people be as "briers" and "thorns" and "scorpions." The life of a man of God will run counter to the world.

III. Ezekiel's Experimental Qualifications (2:9-3:16).

Before one can preach to others he must have an experience—must be in sympathetic accord with God and His message.

1. Eating the Book (2:9-3:9). This book contained God's woes upon the stiff-necked and rebellious people (v. 10). In order to speak God's threatenings effectively to others we must inwardly digest and appropriate them ourselves. The eating of the book was in his mouth as honey for sweetness. Though his ministry was difficult and the judgment severe, the prophet was in entire sympathy with God's purpose and found delight in His will. The result of this eating was that Ezekiel was made "hard of face and forehead" to go against the people who were "hard of face and forehead."

2. Urged on by the Spirit (3:10-14). In order to strengthen Ezekiel for his task, the wonderful symbolism of God's providential agencies which had been before him in chapter 1 was brought to his attention, assuring him that God would accompany him to his new destination. He went in bitterness to the captives. By "bitterness" is meant sadness on account of the calamities of which he was the messenger (3:11).

3. Entering Into Sympathy (v. 15). In order to minister to a people one must enter into sympathy with them; must show that the message is from the depth of the heart; that to declare the message of woe is a great grief. Ezekiel mingled his tears with theirs.

IV. Ezekiel's Grave Responsibility (3:17-21).

God made him a watchman. Every minister is a watchman over his flock. Two things were required of him:

1. To Hear the Word at God's Mouth. The source of his message was God's Word. So today the minister is to get his message from God.

2. Sound the Warning (v. 17). After he heard God's message he was to speak it out. The same duty is upon the minister today. Cases in point for his guidance (vv. 18-21):

(1) When God say to the wicked "Thou shalt surely die" (v. 18), and the wicked man fails to warn him, the wicked man shall die in his iniquity, but his blood shall be required at the watchman's hand.

(2) If the watchman warn the wicked and the warning is unheeded (v. 19), the wicked man shall perish, but the watchman has delivered his soul.

(3) When a righteous man turns to do iniquity and God gives him over to stumbling in his own sin, his past seeming righteousness will be of no avail, but his blood will be required at the hand of the watchman if he fail to warn him (v. 20).

(4) If the watchman so warns the righteous man that he fall not into sin, the man shall be saved and the watchman high delivered his soul.

Ministers have most solemn obligations, that of discharging their obligation whether men will hear or forebear.

Soncan and Delilah.

And it came to pass afterward, that he loved a woman in the valley of Sorek, whose name was Delilah, and the lords of the Philistines came up unto her, and said unto her, Entice him, and see wherein his great strength lieth, and by what means we may prevail against him, that we may bind him and afflict him; and we will give thee every one of us eleven hundred pieces of silver.—Judges 16:1, 5.

RADIO

THIRD ELEMENT IN THE VACUUM TUBE

Grid Added to Fleming Valve by Dr. Lee DeForest Was a Big Improvement.

Any device which will pass electricity in one direction and will wholly or partially obstruct the flow in the opposite direction is termed a rectifier, because, when connected in the path of an alternating current it will suppress one-half of each cycle and therefore the circuit will be traversed by pulsating direct current. A rectifier also is said to possess unidirectional conductivity, meaning, of course, that it will conduct electricity in one direction only. Its ability to rectify currents of extremely high frequency determines its application in radio.

Due to its ability to rectify high frequency alternating currents the two-element (filament and plate) vacuum

two-element vacuum tube with the addition of the grid circuit I-J-K-L. The battery in the grid circuit is called the "C" battery.

As a start let us suppose that "C" battery voltage is zero. The operation of the three-electrode tube would then be exactly like that of a two-electrode tube, just as though there were no grid. Like a two-electrode tube when the filament C-D is brought to incandescence by the "A" battery, a steady stream of electrons will be given off, which will be drawn over to the plate E. Plate E is maintained at a positive potential with respect to the filament by the "B" battery. Now if the grid is made positive with respect to the filament, it is possible to accelerate the flow of the electron stream from the filament to the plate; if the grid is made negative with respect to the filament, the flow of the electron stream from the filament to the plate will be retarded. Or in other words, by making the grid positive or negative with respect to the filament, it is possible to increase or counteract the space charge. The third electrode or grid thus offers a means of controlling the current in the plate circuit without changing the plate potential or the filament temperature.

The characteristic curve of a three electrode vacuum tube is shown in

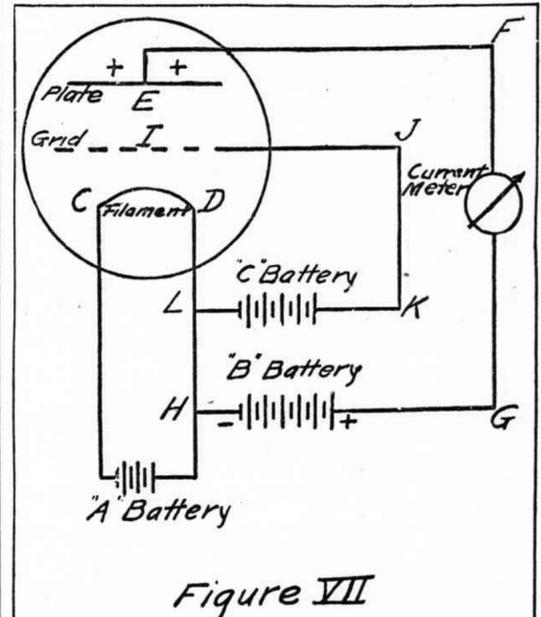


Figure VII

tube can be used in a radio receiver as a detector.

Dr. J. A. Fleming of London, England, was the first to use a two-element tube of the type just described as a medium of rectifying high frequency radio currents. Fleming called his product a valve because it would let current flow in one direction but not in the other direction. The Fleming valve as a forerunner of the vacuum tube of today marked a very important step in the progress of the radio art. The Fleming valve, however, in its original form was not much better than other forms of rectifiers then in use and, owing to the greater ruggedness and ease of manipulation of the latter, did not come into general use as a detector.

Dr. Lee DeForest, an American, greatly improved the Fleming valve

Fig. VIII. This diagram shows the relation of grid potential to plate current, assuming that the filament temperature and plate voltage remain constant.

It can be seen from the curve that by applying a negative potential of value E to the grid, the plate current can be reduced to zero. The negative charge on the grid will have the effect of a negative potential E with respect to the filament, making the negative charge so strong around the filament that the electrons cannot leave it. On the other hand, if a positive potential of value F be applied to the grid with respect to the filament, the maximum or saturation current will flow in the plate circuit. Applying a greater positive potential than F to the grid with respect to the filament will not cause an increase in the plate current because the electrons given off are being attracted to the plate and grid.

When the grid is maintained positive with respect to the filament a small current will flow in the grid circuit. Because of its being positive it will attract the electrons and have a charge given up to it by them.

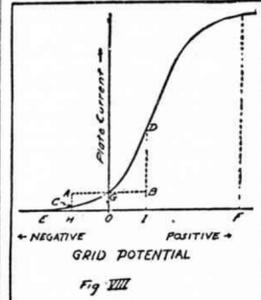


Fig. VIII

FRISCO TALKS TO HONOLULU

New Radio Station at the Presidio Can Be Heard Half Way Around the Globe.

"Hello, Honolulu." That may sound like fiction, but it is a reality, nevertheless.

The new radio station at the Presidio, San Francisco, with aerial conditions right, can be heard half way around the globe. Officials in charge of construction declare it to be the most powerful vacuum tube transmitter on the Pacific coast.

Located on the highest point in the Presidio, overlooking San Francisco bay, two 150-foot aerial towers to augment its efficiency, the new station will command similar stations in Salt Lake City and Cheyenne.

Handling Vacuum Tubes.

When you handle the vacuum tubes of your receiver great care should be exercised that they are not knocked about or that the elements are broken. These little lamps are the heart and soul of the set. A good way to operate these tubes is to keep the glow just a little below the critical point.

REVISION FOR RADIO LAWS

Some of the Changes Recommended to Congress by the Governmental Conference.

More short-wave bands for broadcasting nominal fees for licenses, and provision for permits before erection of transmitting stations are among the changes incorporated in its final report by the governmental conference on radio telephony. All that is needed now to place the recommendations of the conference into effect is congressional action to give the necessary authority to Secretary of Commerce Hoover. A bill was recently drafted to revise the radio communication laws.

More liberal provisions for broadcasting on short wave lengths are provided in the report, which gives broadcasting by the federal and state governments and public institutions exclusive rights to wave lengths from 485 to 495 meters. This is essentially the same wave used for government weather, crop and market reports now, those who live away from the sea-

coast will have a larger variety of radio waves to utilize under the recommendations. The band from 285 to 485 meters is assigned to private and toll broadcasting but the zones from 285 to 315 and from 425 to 475 meters will not be used in regions near the coast because of the chance of interference with marine radio communication. For similar reasons the experts have limited government and public broadcasting on 650 to 700 meters to 400 or more miles from the seacoast, and similar broadcasting on 700 to 750 meters must not be done nearer to the coast than 200 miles.

By the establishment of a new band of wave lengths from 100 to 150 meters for the exclusive use of private and toll broadcasting, the experts foresee the establishment of short range broadcasting.

Reasonable fees that will help to pay the increased cost of radio regulation are proposed to congress, and the conferees also recommended that the regulation provide permits before a transmitting station is erected and before it begins to operate, as is now the case.

STIRRED WORLD TO THOUGHT

How the Ringing Words of the Declaration of Independence Roused Nations From Lethargy.

This immortal State paper (the Declaration of Independence), which for its composer was the aurora of enduring fame, was "the genuine effusion of the soul of the country at that time," the revelation of its mind, when, in its youth, its enthusiasm, its sublime confronting of danger, it rose to the highest creative powers of which man is capable. The bill of rights which it promulgates is of rights that are older than human institutions.

Two political theories divided the world; one founded the Commonwealth on the reason of State, the policy of expediency; the other on the immutable principles of morals. The new republic, as it took its place among the powers of the world, proclaimed its faith in the truth and reality and unchangeableness of freedom, virtue and right.

The heart of Jefferson, in writing the Declaration, and of congress in adopting it, beat for all humanity; the assertion of right was made for the entire world of mankind, and all coming generations, without any exception whatever; for the proposition which

admits of exceptions can never be self-evident. As it was put forth in that time, it was sure to make the circuit of the world, passing everywhere through the despotic countries of Europe; and the astonished nations, as they read that all men are created equal, started out of their lethargy like those who have been exiles from childhood, when they suddenly hear the dimly remembered accents of their mother tongue.—George Bancroft.