

Supplement to Ellie's Story
(The polio epidemic, FDR, and Warm Springs, Georgia)

Introduction:

Franklin Delano Roosevelt was the 32nd President of the United States (1933-1945). In 1921 he was stricken with polio. He purchased a resort at Warm Springs, Georgia, in 1926, where he founded a hydrotherapy center for the treatment of polio.

Objectives:

1. Familiarize the children with Franklin D. Roosevelt.
2. Examine FDR's 1933 Thanksgiving Day speech given at Warm Springs.
(document attached in the Appendix at end)
3. Explore Roosevelt's connection with other polio victims.
4. Explore the life and treatment at the Institute at Warm Springs fostered by the Georgia Warm Springs Foundation.
5. Explore the inventive side of President Roosevelt necessitated by his love of driving.
6. Examine FDR's Rural Electrification Act of 1936, part of the New Deal programs.

Background for Teachers:

At the turn of the twentieth century Warm Springs, Georgia, became a popular vacation resort for the wealthy. The spa boasted buoyant, 88° waters year-round. Well-to-do families from the area built summer homes and the Meriwether Inn, a 118-room facility, opened on a hill overlooking the springs.

President Roosevelt visited Warm Springs at the request of George Foster Peabody, a wealthy banker and personal friend. Peabody told Roosevelt of substantial improvement another victim of polio had experienced at the springs. Roosevelt visited Warm Springs and the waters gave him relief and seemed to improve his weakened muscles.

Roosevelt used two-thirds of his personal wealth to purchase the Inn, the springs, and 1,200 acres in 1926. He established the Georgia Warm Springs Foundation on July 28, 1927. He visited Warm Springs 41 times. On April 12, 1945, President Roosevelt died at the Little White House, his home in Warm Springs.

Timeframe:

(2 – 5 lessons)

+entire day if a field trip to the Little White House in Warm Springs is possible

Engage:

1. Watch a video clip from United Streaming (discoveryeducation.com) or elsewhere on Roosevelt.

2. Discuss the clips and let children add whatever else they know about Roosevelt.
3. Give each child a copy of “An FDR Puzzle” which can be found in the **Appendix at the end of the lesson**.

Explore:

1. Divide the children into groups of four or five. Give each child a copy of FDR’s Nov. 30, 1933, Thanksgiving Day speech. Parts of it are referenced in *Social Studies Makes Me Sleepy* when Ellie first arrives. Have each group work together using this primary source document and come up with ten things that they felt Roosevelt said were important. Post on large paper. Let the class compare/contrast results.
2. Therapy at the pools was very important for polio patients. Using a computer and LCD projector explore the article entitled “Pools for Polio Patients” which appears in the **Appendix at the end of the lesson**. Discuss how/why the accommodations at the pools helped with the therapy of the patients.
3. Divide the class up into boys and girls. Have each group select a captain. Give the captain a bell. Use the questions on the “Trivia Cards” appearing in the **Appendix at the end of the lesson** to challenge the students and review their knowledge of FDR. Read a question and the first team to ring gets the opportunity to answer the question for 10 points. If they are wrong, the question goes to the other side. If a side answers incorrectly, 10 points are deducted from their score.
4. Roosevelt was a New York aristocrat who probably would not have ventured into South Georgia had he remained healthy. His trips south once he contracted polio introduced him to the poverty there during the Depression. It was FDR himself who linked the country’s rural electrification program (New Deal’s Rural Electrification Act of 1936) to his adopted Warm Springs, Georgia. "Fourteen years ago, a Democratic Yankee came to a neighboring county in your state in search of a pool of warm water wherein he might swim his way back to health," Roosevelt said before a crowd of 20,000 one summer day. "The place, Warm Springs, was a rather dilapidated, small summer resort. His new neighbors extended to him the hand of genuine hospitality, welcomed him to their firesides and made him feel so much at home that he built himself a house, bought himself a farm, and has been coming back ever since." Discuss what other good things happened (personally and for the country) out of Roosevelt’s misfortune of contracting polio.

Extend:

1. The car, thanks to Ford, was changing America. Talk about those changes. One of President Roosevelt’s favorite things to do was drive his car. The first hand-controls used in cars to help people who could not use their legs were adapted from farm equipment. Project the article entitled “Special Driving Control” found in the **Appendix at the end of the lesson** using the LCD. Discuss it. (Roosevelt often helped in the designs.) Then give each child a copy of Edison’s patent

- which also is in the **Appendix at the end of the lesson**. Talk about how his invention changed a nation. Have each child create/invent a device to make life easier for someone with a challenge. Design it in the model of Edison's patent.
2. Many parties, skits, dinners, and affairs were held at Warm Springs which often spoofed polio. Project the menu from the S.S. Paral Brace-Lines dinner which appears in the **Appendix at the end of the lesson**. Identify items that have been named the way they are for a special reason. Then have each child design their own menu for a dinner of interest to them (soccer banquet, Habitat for Humanity fund raiser, etc.) and design a menu using aspects of their selected interest.
 3. A trip to the Little White House in Warm Springs, Georgia, would be the ultimate culminating activity.

Evaluation:

- Use all the work created throughout this lesson/series of lessons to evaluate the children's understanding.
- Roosevelt often spoke of the "spirit of Warm Springs." Have each child write a paragraph explaining what you think he meant by this.

Standards:

- SS5H3.b – The student will describe how life changed in America at the turn of the century. Describe the impact on American life of Thomas Edison (electricity).
- SS5H4.b – The student will describe U.S. involvement in WWI and post-WWI America. Describe the cultural developments and individual contributions of the automobile (Henry Ford).
- SS5H5 – The student will explain how the Great Depression and New Deal affected the lives of millions of Americans.
 1. SS5H5.a – Discuss Franklin Roosevelt.
 2. SS5H5.b – Analyze the main features of the New Deal's Rural Electrification Act of 1936.
 3. SS5H5.c – The student will explain how the Great Depression affected the lives of millions of Americans. Discuss the polio epidemic.
- SS5E2.c – The student will describe the functions of four major sectors in the U. S. economy. Describe the government function in taxation and providing certain goods and services New Deal).
- SS5IP1 – The student will be able to locate, analyze, and synthesize information related to social studies topics and apply this information to solve problems/make decisions.
 1. SS5IP1.a – Compare similarities and differences
 2. SS5IP1.c – Identify issues and/or problems and alternative solutions
 3. SS5IP1.f – Identify and use primary and secondary sources.
 4. SS5IP1.k – Draw conclusions and make generalizations.

Appendix

Address of President Roosevelt
Thanksgiving Dinner, Nov. 30, 1933
Warm Springs, Ga.

Members of the family of Warm Springs:

I suppose I have to have my chance at the press and so I will tell you now that there are certain papers in the United States that you need not read tomorrow because I am going to tell you now what the headlines are going to be tomorrow morning. They are going to say that Dr. Julian Boehn is going to be appointed Secretary of the Treasury (laughter) and that Gus Gennerch is going to head the Federal Reserve System (laughter).

I don't know what the number of this party is, the eighth or ninth, or something like that, but I go back to the days when there was Fred Botts and two or three other people here for Thanksgiving, when we had our Thanksgiving party down in what we call Wreck -- I don't know that it is even called "Wreck" nowadays, but then I go back to the time in 1927, when a lot of you people here in the front part of the room were not even born -- centuries ago -- generations ago, in the days of your fathers and mothers. In 1927 we had 80 people at the Thanksgiving party and when, in 1928, we got up to 102 people, we all cheered. In 1930, I think it was, in that first year of the great depression, we passed the 200 mark, and in 1931 we got up to 270 people. In 1932 we passed the 300 mark and we had 310 people who sat down in the old dining room for Thanksgiving evening. In 1932 -- 310 people, and it was so many people that the old dining room sank three inches. And largely because of that physical fact Arthur Carpenter got cold feet. Arthur Carpenter said "we will never have another Thanksgiving in the old dining room." He was right. He was a prophet and we will never have another there, thank God, and that is why we are here tonight. We are because we made up our minds a year ago that we would never have another Thanksgiving party in that dangerous old dining room. What has happened? There are 370 people here tonight and I find that there is only one thing I never did provide for; I never happened to mention to Henry Toombs that he might have to have a bigger dining room than this one. We may have to in time -- nobody can tell when -- and if things go as fast in the next ten years as they have in the past ten years, Henry is going to be busy day and night building new buildings for us. I am not going to make my set and formal speech and because the hour is getting a little bit late, and we have a lot of people we want to look at, I am going to start introducing them now. First of all I am going to introduce to you the Granddaddy of Warm Springs, a very wonderful person who goes back to the Georgia of the days before the war, the war between the States -- a very wonderful man who went north after that and who, all his life, has been doing good to his fellow-men. He is the man who, a good many years ago, found that the old Warm Springs was about to pass out of the ownership that had held it for many years, and who came to its rescue and, after he had come to its rescue, he wrote to me about it. That is how I happened to come down here. As a result of that visit and as a result of the splendid cooperation that I had from the Granddaddy of Warm Springs, we are all here tonight. And so I know that you will be glad to see my old friend, that splendid American citizen, George Foster Peabody (applause).

And then in those old days -- before you people were born (indicating young folks in front of him) -- 1925, and you all know the story, various people came down here and there wasn't any doctor. There wasn't any swimming pool and there wasn't any anything, except a few old cottages and, as you know, you had to go to bed in the dark because anybody on the outside could see you through the boards if you stayed in the light. In those days we started what was called the medical experiment, to see whether Warm Springs was going to be worth while. I couldn't swing it alone, and I found a very wonderful man from out in Chicago who dreamt the same dream that I did, and he came along. Through his generosity -- more than generosity -- through his faith and his belief in what we might accomplish, we held in the spring of 1926 what was called the Medical Experiment, and through that we sold the idea of Warm Springs to the Medical profession. The man who made possible that period of proving what we believed in was Henry Pope, one of our Trustees, and he is here with us tonight (applause).

And then, as time went on, we decided that we weren't just Georgia, or just the United States; we decided that we were the spirit of America in the broader sense of the word -- the whole of the continent. We realized that there were a lot of cousins of ours who lived across the line, and a lot of people came down from Canada, among them a good friend of ours who has stayed by us through thick and thin, and who has spread the Gospel all through Canada, Leighton McCarthy (applause).

Of course, all of us who are old-timers, saw that we had to get in some youngsters, and so we have come down to what may be called the second generation of Warm Springs. Tomorrow at our Trustees Meeting we are going to elect a young man as Trustee who has done much for the Foundation -- done much in the same spirit for the Foundation as he has applied to the service he has accomplished for the government. He is a young man and an old friend of mine. He has given the right kind of spirit to his work for your country, and tomorrow, I am very glad to say, we are going to have a new Trustee, Jim Moffett, of New York (applause).

Then, I am coming back to a sort of side kick of mine. You know, things don't just happen, and bills just don't get paid, and accounts just don't get made up haphazard, and I was very fortunate in those past years in having as my law partner a man who is not only a good lawyer and, believe me, they are mighty rare, but also a man who understood what all this work was about, and who has given unselfishly and without pay -- which is something that most lawyers don't do -- a great deal of time and effort to keeping our books straight and proving to the public that we were a sound financial institution. More than that, he has given of his time and his influence and his money in showing the city of New York and the United States something about the ideals that we all have. My old friend, Basil O'Connor (applause).

In talking to you about the spreading of the story that has to go on from day to day, I don't suppose there is anybody in this country who has done more in the past to spread the story and who is doing more at the present time to spread the story, than Keith Morgan, and I am going to ask him to get up now -- Keith (applause).

You have all heard a lot about the story of Warm Springs. In those old days, in the spring of 1926, everything depended on the way the experiment was started and, as you all know, it wasn't just a question of medical care, it isn't just a question of the exercises we all take, but it is a question of the spirit of Warm Springs, and there is nobody in this room now who is more responsible for the spirit of Warm Springs than our old friend, Dr. Leroy W. Hubbard (applause).

Last week we had a party here -- the christening of this Hall -- Georgia Hall -- and I said then what I am not going to repeat now, except the bare outline of the fact that we would not any of us be here tonight unless this section of Georgia and the State of Georgia had not only welcomed us with open arms but also done everything they could to assist us in our work. For a good many years we have had the vision of Georgia Hall, but it took our neighbor from over in Lagrange to make that dream come true. An so Cason Calloway, in all of the future days of the Warm Springs Foundation and of Georgia and of the country, is going to be known as the man who more greatly than any other started our dream to come true. Cason Calloway (applause).

I really should have introduced his partner in this great enterprise at the same time that I introduced him, because up in the first city of this State -- in Atlanta -- the man who so greatly helped Cason Calloway and made possible the completion of the Hall was Mr. Cator Woolford, and I am glad he has come back with us again tonight (applause).

I go back to a certain time of 1924, the time when everything was closed -- even the old Inn -- and it was pretty lonesome down here. All of the good people down in the Village were most kind and gave us every kind of hospitality. But outside of old Tom Lawley, who was running things here in the off season as well as the open season, there wasn't anybody up here on the old hill at all except the old postmaster, but all of a sudden, one afternoon, there came up to my cottage a very charming lady, and she said, 'I am the owner of this property, or, rather, I was the owner up to a very short time ago, because it was my family that owned and developed Warm Springs through all these years', and so we are happy in having the interest of the Davis family and the Wilkins family in the past, but also happy in having the continued interest that Miss Georgia Wilkins has given to this old property that she will always feel in her heart belongs to her, Miss Wilkins (applause).

You know, this work isn't just local. It covers a very wide area. It covers in its practical application the need of cooperation of science in this whole section of the United States. It needs the help of other hospitals and other institutions, so that we can carry out a rounded work down here. I am very happy that Dr. Hoke has made it possible for us to be affiliated with the Piedmont Hospital in Atlanta, and I am glad that Dr. Floyd McCrae is here tonight so that we can tell him a little bit of our appreciation of the splendid cooperation that the Piedmont Hospital is giving to our Foundation. Dr. McCrae (applause).

And now I am going to introduce to you another very old friend of mine. We have been working on a great variety of social problems, charitable problems, economic problems, and government problems, for I don't know how many years, and during all these years -- I think it started a way back in 1927 -- we have had his interest in the work that we were doing. But this is the first time that he has had a chance to come down here and see the work with his own eyes. You all know of him and you all know of the splendid contribution he has made to American life. Mr. Raymond Fosdick, of New York (applause).

And with him, as a guest, is a great builder -- a man who built Radio City. A lot of people poked fun at Radio City and said that it would never be used and probably it would never have been used if the conditions that prevailed up until a few months ago had continued (applause). But today, the builder of Radio City, Mr. John Harris, can feel justified, I believe, in the great work he has accomplished, and we are glad to have his interest in Warm Springs (applause).

A great many years ago a very delightful young couple, half American and half British, came down here. They have been coming almost all the time ever since, and we hope they will always come down here, Mr. and Mrs. Patterson. Mr. Patterson is making possible, through his kindness and his energy, a very wonderful concert that is going to be held in New York City in about ten days, a concert for the benefit of the Warm Springs Foundation. Mr. Patterson (applause).

Then, we have another problem. Nobody knows anything about the water, where it comes from and where it goes. All we know is that out of those hills come all kinds of waters. I often think of the fact that about five miles west of here there are white sulphur springs and black sulphur springs and yellow sulphur springs, and here we have our own Warm Springs, with magnesium and lime. Only about a mile east of here there is a spring that has nothing in it at all except that it is just plain water and very cold, and then about five miles further, there is another spring that has iron in it. Yet there has never been any scientific survey of this Pine Mountain region. I tried a number of years ago to get the U.S. Government interested in a geological survey of this mountain of ours, but I was told by the government that then existed in Washington, that there was nothing in the water anyway (laughter). But in the past few months I have been able, somehow, to persuade Washington (laughter) that there is something in water, and so the Geological Survey in Washington is cooperating with the State of Georgia, and we are starting a survey of what lies under Pine Mountain. I am quite sure that we would all like to know something about it from the scientific point of view. The result is that this survey of the geology of Pine Mountain that Mr. Peabody and I have been talking about for years is about to be actually started -- started under the direction of Dr. Hewitt, of the Federal Service, and Dr. Krickmay, the Georgia State geologist. We are going to find out something we have never known before. I am going to ask these two gentlemen to stand up (applause).

Now there are three old friends, and I know you won't forget who they are. Even in these past ten days that I have been here, any number of people have come to me and they have said that in history there have been some very wonderful architectural projects started in the United States, and when they have been completed they have served as lessons to generations to come -- for instance, the University of Virginia has been widely copied throughout America. I think that we are very fortunate in having a Georgian, an old friend of ours, who has caught the spirit, not only of Colonial days, but the spirit of the future in the designing of what I believe will be an architectural gem that will be visited and written about and looked at for many generations to come. The man who is responsible for it is our old friend Henry Toombs, and he has got to get up whether he likes it or not (applause).

I don't know whether you know it, but the only reason I am doing all this talking tonight, is because Arthur Carpenter again has cold feet. (Laughter) But it gives me a chance to get back at him. A good many years ago there wasn't any head of things. Topsy ran Warm Springs. Well, we discovered a youngster down here who was fully capable of handling the job of running Warm Springs. He not only caught the spirit of Warm Springs, but he gave a spirit of his own to the development of the place, and if it had not been for Arthur Carpenter, you and I would not be in this Hall tonight. And if it had not been

for Arthur Carpenter there would not be any Warm Springs tonight, and whether he likes it or not, I am going to tell you quite frankly that Arthur Carpenter is my right bower, and if it were not for him, this place could not keep on going. Get up Arthur (applause).

Once upon a time there was a doctor (laughter). Thank God, a doctor with a sense of humor and with a heart. He suggested tonight, when we were seeing those tricks -- when we were seeing those things disappear, that it would be wonderful if the medical profession could make things disappear from the human body as easily as Mr. Boehn made those things disappear on stage. Magic cannot accomplish that result with the human body, but modern science comes pretty close to equalling magic. One of the men -- one of the two or three men in the whole of the United States -- carrying out scientific magic on human beings, who cure them and make them useful citizens, is the Surgeon in Chief of the Warm Springs Foundation. But it is not just a question of scientific skill. It is not just a question of expertness with a knife. It is just as much, I believe, a matter of the understanding of human nature -- the understanding of what to try and what not to try. He is man who is dear to my heart because he is not above a logical experiment (applause). He is also dear to my heart because in a larger percentage of cases than anyone else I know, his experiments work (applause). And with it all, I don't have to say any more to you people, young and old, about Dr. Hoke. He is our friend, and he understands the spirit of the place, and he understands what he can do and what he can accomplish, and that is why I believe today that the Foundation is more greatly blessed in having him here than any other one thing. He has a vision, just as we have a vision, a vision of making Warm Springs not merely a place where we will take care of a comparatively limited number of people -- which is all we can manage to take care of down here -- but a also a place where we can do good to a great many other people -- a great many people who cannot come here. That is by proving, by our example, that the things we are doing are worth while, that they can be duplicated in other parts of the country, that we can be not merely an institution for therapy, for the care of the individual, but also an institution for education -- education of the medical profession, education of families, of individuals, and of children. So that, in some way, in many ways, we can make our influence felt among hundreds of thousands of people in our country who, for one reason or another, need the kind of care we are providing here.

And as an indication of the interest of the Old World in the work we are doing here, we have present among us tonight Dr. Heartl, of Germany, who has come here to study our work, and make a scientific study of the waters.

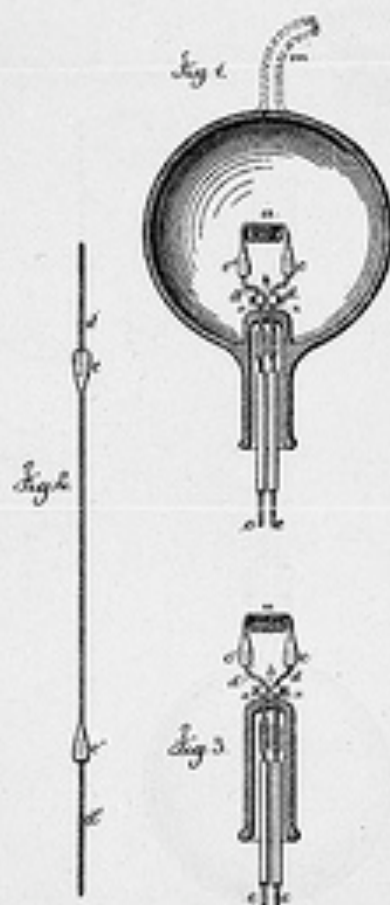
And so, my friends, I think it is appropriate that in closing these introductions, I should again introduce you to a very old friend, who to me means more for the future of Warm Springs than any of the other people who are connected with our Institution, a man whom we recognize as a great leader, not only of American medicine, but of American progress -- social progress and economic progress in every branch -- Dr. Michael Hoke (applause).

Source: National Archives

T. A. EDISON.
Electric-Lamp.

No. 223,898.

Patented Jan. 27, 1880.



Witness
Charles Smith
H. P. Pinckney

Inventor
Thomas A. Edison
+ Lemuel W. Perrell
att

An FDR Puzzle

Read these paragraphs about Franklin Delano Roosevelt and then try to find the capitalized, underlined words in the puzzle. They may be written forward, backward or diagonally.

Franklin DELANO Roosevelt, our thirty-second PRESIDENT, looked very different from other presidents. From the time he was thirty-nine (when he was struck by POLIO), he was in a WHEELCHAIR most of the time. He was known for his pince-nez EYEGLASSES (which don't have arms and are clipped to the nose) and the long, cigarette holder that always jutted from his mouth at an unusual SLANTED angle.

His personality was different than many other presidents also. Rather than being very serious, as most people would expect a person in such an important position to be, FDR was a very fun-loving, CHEERFUL man. He had a memorable LAUGH. He loved Popeye, Donald Duck, MICKEY MOUSE, and slapstick humor. He didn't like AIR CONDITIONING, being rushed, nor big words.

FDR loved the SEA. One of his favorite songs was the Navy's "Anchors Away." He collected naval prints and ship models, as well as books, STAMPS, and autographs.

He and his family were devoted to the EPISCOPALIAN faith, and they attended church together often. FDR was a very thoughtful man and was always concerned about OTHERS and their feelings. He was loving toward his FAMILY, and he tried to make FRIENDS with nearly everyone in WARM SPRINGS even though none of them were famous and powerful. He established two foundations to help victims of polio.

He was PRESIDENT during two of our country's biggest crises: (hardest times) the DEPRESSION and the second WORLD WAR. He led America so well that people elected him FOUR times. He served TWELVE years, which was longer than any other president.

R U O F S D N E I R F O T H E R S A B
D E R G E Y P W R T Y U I Y T R F D S
S F D R A I R C O N D I T I O N I N G
T U Y T G H E T Y R G H I J I O V B N
A W D R E F S H G R L L I O P T R E I
M H E R T F I D E R T D F G T Y U R R
P O I L O P D F Y D E R W S D F G E P
S D F A V F E G E G H Y T A S D S T S
T R F U J E N D G F D E R T R U J H M
K G F G R E T J L J H Y U T O F R D R
F S D H O U Y F A M I L Y M G R E D A
F L H G N V C D S D E R Y H J U Y T W
N A I L A P O C S I P E D E R T Y U I
B N H G L K I U E D K H G F R T Y U I
G T R F E D S F S C H E E R F U L G R
O E D S D F G R I A H C L E E H W D T
F D R F G H J M N O I S S E R P E D E

Trivia Cards

Cut these out for use with the game on the back cover.

How many times was FDR elected president of the United States?	How were Franklin and Eleanor related?	Which of FDR's relatives also served as president of the United States.	What did the Dutch name Van Roosevelt mean?
Who were the two greatest polio researchers?	What two things was FDR doing right before he passed away?	Who were FDR's 3 favorite cartoon characters?	When FDR was sick in his room on the second floor, how did his mom talk to him?
What did FDR think about haircuts?	How are the ties different on the finished and unfinished portraits of FDR?	What were two of the biggest problems of the Great Depression?	What program did FDR set up to help support elderly people when they retired?
Was FDR a Republican or a Democrat?	What was FDR's career before he became a politician?	What state had FDR for its governor?	What did FDR call his wife and children?
One of FDR's models was made from the actual wood of a very famous ship. What was the ship?	What was one of FDR's collections?	Along the walkway to the museum, the 50 states are represented by flags and what?	How are pince-nez glasses different from other eye-glasses?
Were Roosevelt's Fire Side Chats broadcasted over the television, radio, or both?	How many stars were on the presidential seal when FDR was in office?	Who was Fala?	What is a 2-word name for poliomyelitis?
Where was the attack in Hawaii that brought the United States into World War II?	Spell the name that the D in FDR stands for.	What was the situation when FDR risked his life for Mayor Cermak?	Warm Springs is located 70 miles south of which large Georgia city?

ANSWERS

Trivia Cards

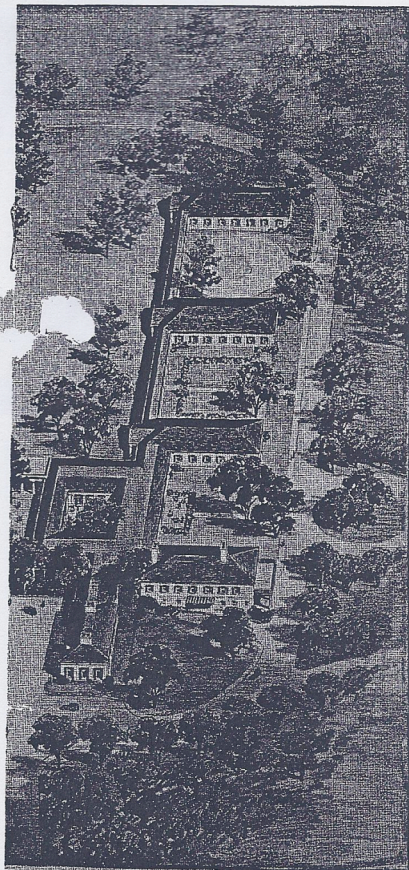
Cut these out for use with the game on the back cover.

Field of roses.	Theodore Roosevelt	Fifth cousins once removed	Four times
She climbed a ladder and talked through the window.	Mickey Mouse, Donald Duck, and Popeye	He was having his portrait painted and was reading his mail.	Sabin and Salk
Social Security	Unemployment and the poverty	FDR is wearing a red tie in the unfinished portrait and a blue tie in the finished portrait.	They were a waste of time.
Babs and the chicks	New York	He was a lawyer.	A Democrat
They clip to the nose	stones	Any of the following: stamps, ship models, prints, or autographs.	The Mayflower
Infantile Paralysis	FDR's dog	48 stars	Radio.
Atlanta	A man was shooting at FDR but he wouldn't drive away without the dying mayor.	Delano	Pearl Harbor

Presents, Present and Future

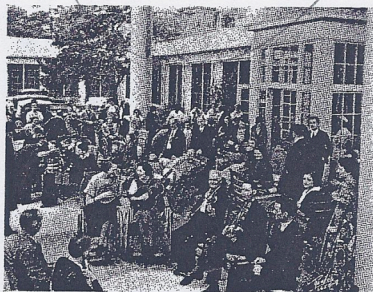
SPECIAL DRIVING CONTROL

Created for President Roosevelt



Something like this. In the foreground is Georgia General Norman Wilson Memorial Infirmary.

At ten-twenty o'clock, President Roosevelt spoke to us by radio as he thanked the million or more people in all parts of the nation who had helped make the occasion, in his words, "the happiest birthday I have ever known."



Just a Couple of Gals "Breakin' Down"

In 1933 the DeSoto Motor Corporation delivered to President Franklin D. Roosevelt a convertible sedan which is so constructed that it can be driven without any use of the feet whatsoever.

A quick glance at the accompanying illustration would suggest that the car had not been radically altered, in respect to driving equipment, from the ordinary automobile which we all know.

As a matter of fact, the only such item which is missing is the foot throttle. (The clutch and service-brake pedals are there . . . but only for the convenience of other persons in charge of the car who are accustomed to the conventional mechanism.)

On closer inspection of this picture, one will be even more surprised to note how little additional equipment was necessary to make it possible for the operation of the car to be merely a matter of a few convenient movements of only the right hand!

The first question that occurs to the mind is, "How has it been made possible to put the car into gear without first disengaging the clutch?" The answer is, "By means of a centrifugal type of clutch, in which flying-weights (as on a motor governor) controlled by the speed of the engine engage or release the clutch mechanism."

When the starter button, on the dash (in this picture almost out of sight behind the steering wheel), which takes the place of the automatic foot-throttle starter in the standard DeSoto, is pushed in—the motor starts, and is fed just enough gas to keep it running slightly below the speed needed to engage the centrifugal clutch.

Therefore it is possible to put the car into any gear—first, second or high—even though the car may be standing still, and the motor running. With the car in, say, low speed, the trigger on the gear-shift lever, just below the knob, is raised, thus accelerating the motor and engaging the clutch.

When the car has attained sufficient speed, the trigger is again dropped, the speed of the motor is retarded enough to disengage the clutch, and the car may in like manner be shifted into the higher speeds.

It was mentioned above that the foot throttle had been removed from the car; it has been replaced by the long lever directly beneath the steering wheel, which is controlled by the extended fingers of the right hand. As it is raised above the central position in which it is shown in this illustration, the car is accelerated. As it is lowered below this central position, it applies a special booster vacuum-brake to all four wheels—just as though the ordinary foot-brake had been depressed.

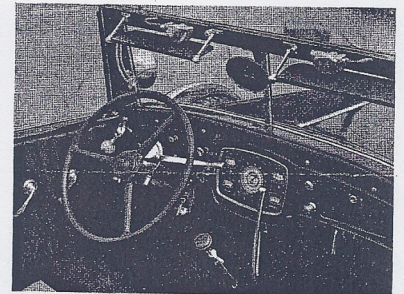
The lengthened emergency brake lever is connected with all four wheels, the same as the booster vacuum-brake controlled by the lever mentioned above; while under the cowl, to the right of the instrument panel, is a parking-brake

lever, with ratchet. This is connected to a brake band on the drive shaft immediately back of the transmission.

The other equipment of the car, which may be seen in the accompanying illustration, is regular, and includes a rear vision mirror clock, a searchlight, the beam of which may be directed from within the car, driving-lights controlled on the steering wheel, and the usual instrument panel.

The special equipment of this car was installed by a small group of selected engineers under the direction of the DeSoto Motor Corporation. When the car was ready, it was presented to the President at the White House in Washington.

President Roosevelt was well pleased with the ingenious controls. He showed great interest as



View of refined control.

the details of their operation were being explained to him; and smiled and chatted delightedly with Mrs. Roosevelt and officials of the DeSoto Corporation, who attended the presentation, as he inspected the car carefully from bumper to bumper.

The Discussion Club and the Play Reading Club have been progressing rapidly. The former meets every Sunday night to discuss some current problem or situation of the day, such as "Organized Charity," "N. R. A.," etc. The Play Reading Club, gathering on Wednesday night, has been specializing in modern plays. Some of the dashing heroes, Phil Buchen, Charles Tarrant, and Alva Wilson really put their heart and souls into their parts. And it's worth any amount of money to see Fran McGaan waxing sentimental, as she vividly portrays Gilda in "A Design for Living."

It may be our Scotch blood or it may be the depression, but anyway, we all welcomed the announcement that in the future the Foundation movies are to be free to Foundation residents.

Pools for Polio Patients

By HENRY J. TOOMBS, Architect

AS the treatment of anterior poliomyelitis at Warm Springs is in part dependent on the exercising of muscles in warm water, much thought has been given to the construction of pools and equipment for this special purpose. These notes on the results of experience here are presented in the hope that they

may be of value to other interested institutions.

The present facilities consist of three large pools, one enclosed and two outdoor, all connected by waterways, so that patients may swim from one to another. Of the two outdoor pools, one, 35 feet by 69 feet, is equipped with tables for the va-

rious exercises. The other, the same size, is used for swimming and water sports. The enclosed pool which is heated and glass-roofed, was built particularly for winter use (35 feet by 85 feet), and is used both for exercises and swimming. In summer this pool is used for the treatment of those patients who burn easily from exposure to the sun. In all cases, the table exercising equipment is secured to the floor so that it may be easily removed to free an area for swimming or play.

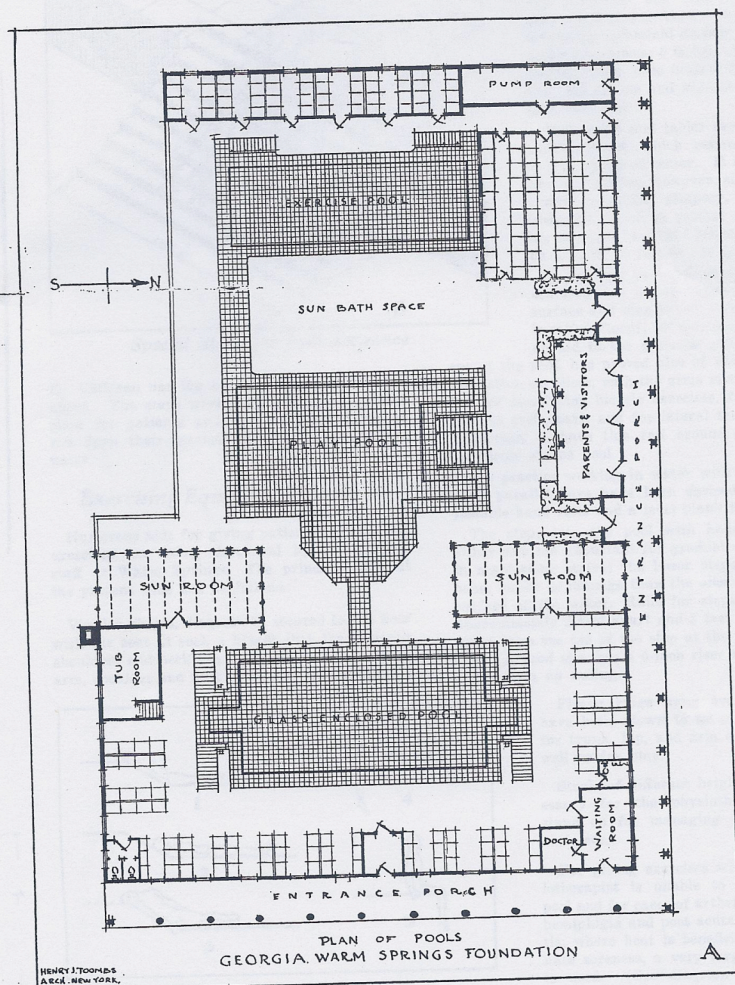
Heating water for the pools has not been a problem at Warm Springs, since the water there comes from a natural spring at a temperature of approximately 89°. It can, of course, be done artificially.

Pool Sizes

The outdoor pools for patients at Warm Springs have been adapted in part from old pools which existed before the organization of the Warm Springs Foundation; consequently their sizes are somewhat the result of chance. The 35-foot dimension, however, seems to be an economical width. It is sufficient for three rows of exercise tables. The 70-foot length allows for four tables. (See diagram A). Such pools could be increased or decreased in units of 12 feet in width from center to center of tables. The determination of this unit depends not only on providing sufficient working space for the operator but also on avoiding too much disturbance of the water. Choppy water hinders the operators as they are unable to see clearly under the surface. The indoor pool at Warm Springs was built 35 feet by 85 feet to provide a space for play in addition to an exercising area similar to the outdoor pool.

Pool Depth

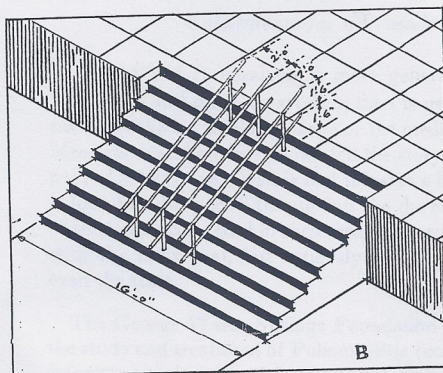
The pools vary in depth from 4 feet to 5 feet. The indoor pool is 4 feet 6 inches at one end and 5 feet at the other, the bottom being sloped only for drainage. As diving is difficult or impossible for most patients a greater depth is not needed. The depth of approximately 4 feet 6 inches was arrived at as sufficient for swimming and not too deep for the average patient to stand on the bottom, as it is desirable for the patients to be able to walk in the water. Pools built specially for children should be relatively more shallow, though the young patients have used one end of the play pool at Warm Springs without hardship. Most patients contrive to get con-



» » HELPFUL HINTS AND SUGGESTIONS » »

siderable exercise by holding to the pipe rail which encircles the pool at about the water level. This rail is also important as an aid to getting in or out of the pool. The water levels of the pools are maintained approximately six inches below the surrounding platforms, a distance less than the usual standard for pools. This was done as many patients find it easier to enter or leave the water by slipping themselves over the edge, consequently the less distance between the platform and the water the better. A scum trough is most desirable.

For entering and leaving the pool steps or ramps with rails must be provided. An arrangement which is adaptable to both adults and children and successfully used is shown in diagram



Special Steps for Pool Entrance

B. Children use the lower rails and adults the upper. The steps were made wide to provide a place for patients and particularly children to rest from their exercise and yet remain in the water.

Exercising Equipment for Pools

Numerous aids for giving patients under-water exercises are being developed by the medical staff at Warm Springs. The principal ones at the present time are as follows:

Wooden chairs, diagram C, secured to the floor with the seat at such a height that the patient's shoulders and neck are under water, are used for arm, shoulder and neck exercises. For children a

small chair is secured on the seat of the larger.

Tables, diagram D. This table is extensively used for various groups of exercises. Its usefulness would be increased by making its height adjustable, as in all cases it is important to keep that portion of the patient under water which is being exercised. Cuts 1, 2, 3, 4 and 5 show how the table is particularly adapted to the different exercises. 1 shows the position of the patient on the table for abdominal hip flexion, lateral and anterior abdominals; 2 for abdominals, also abduction and adduction of the hip and rotation of the hip; 3 Patient on side for hip flexion, hip extension, knee flexion and knee extension, lateral trunk and the more difficult abduction and adduction exercises; 4 is lower back exercise, hip extension, abdominal exercises and abduction exercises; 5 is foot work, toes, ankles, knees, knee flexion and extension, hip flexion and hip rotation and back exercises.

The chairs and tables are made of cypress wood, which resists the decaying action of water. It is not the perfect solution, however, since it becomes somewhat slippery. Another material, which is neither expensive nor so heavy that the equipment would be difficult to remove, is needed.

A pipe rail (a 2-inch diameter pipe, centered two inches below the water surface and nine inches from the side is satisfactory), already mentioned as an aid to the patients' getting in or out of the pool, has proved also of value for coordination exercises, with the arms resting on the bar for simulating bicycle exercises, for spreading the feet apart, and for lateral trunk. It is convenient to have this rail around the entire perimeter of the pool.

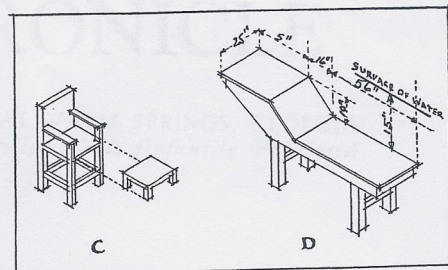
For practice walking in water with hand support, parallel bars have been devised with adjustable hand rails and a level plank floor.

The steps into the pool with hand rails on either side are important for graduated exercises in negotiating stairs; the lower steps naturally being easier to manage than the ones nearer the surface of the water. Rails for steps should be approximately 2 feet apart and 3 feet high, measured from the top of the step at the face of the riser. A good step has a 6-inch riser and 12-inch tread, with no nosing.

Flying rings hung over the pool have been shown to be of assistance for trunk, hip, and arm exercises, as well as for play.

Stools of different heights are necessary for the physiotherapists to stand on for managing the various exercises.

For giving exercises when a physiotherapist is unable to work in a pool and for cases of arthritis, spastic, hemiplegia and post acute poliomyelitis, where heat is beneficial to eliminate soreness, a very large bath tub is used. (See diagram E). Note that this tub has a wide rounded



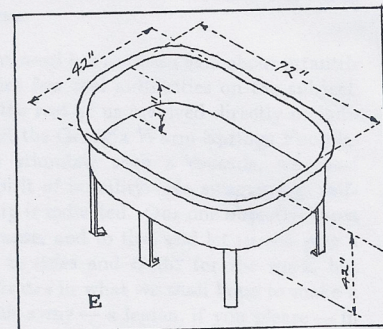
Special Underwater Table and Chair

wood rim, so that the operator may comfortably lean against the edge.

For exercising patients who are unable to enter the water, tables approximately 3 feet by 6 feet in dimension, with padded tops, have been found useful.

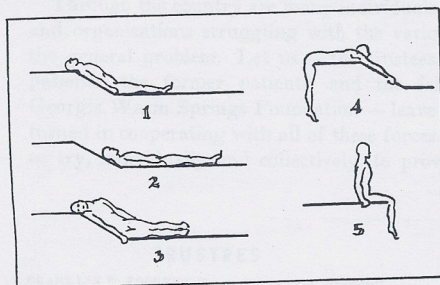
It is rather beyond the aim of these notes to take up the matter of pool construction, of which there are a number of well known methods. It is only necessary to emphasize the urgent importance, in planning pools for polio patients, to take every precaution to prevent slipping of patients and of attendants carrying patients. The pools and surrounding platforms at Warm Springs are of concrete, and have given a very satisfactory service. The platform surface is a rough float surface. Tile floors necessarily are more easily kept clean, and there are many kinds of non-slip tile for the platforms which safeguard the patient.

Other important features used with the pools at Warm Springs are the sun rooms and outdoor curtained spaces for sun baths. The former are



Large Tub for Special Cases

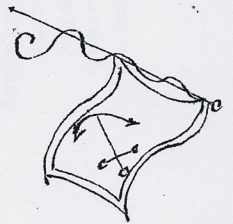
heated, glass enclosed and roofed rooms 20 feet by 30 feet where patients may remove bathing suits, and take sun baths. The latter are similar for use in warm weather and consist of curtained-off spaces open to the sky. Dressing rooms are provided with a hand rail on either side wall. Of especial interest are the porches, with floors at grade, surrounding the pool building for over 300 feet, which enable buses and private cars to be parked close to the porch and patients to enter the building with a minimum distance to walk or be wheeled.



Indicating Use of Underwater Table



M E N U
 S. S. BRACE
 Of the Brace Line



ROASTS

Rusty beef and Warwickshire pudding
 hot Barkers, Copeland's mustard
 Plasteridge wings, Gillette sauce
 Lauerkraut and Voedors
 Chopin Suey

VEGETABLES

hamstring beans
 potato Gyps
 scoliosis potatoes

SALAD

rotator pear with French dressing
 Hoke tibia turn-overs with Irwin dressing

DESSERTS

Mince pie a la Maude gastrocnemius pears
 Wright pudding with Harding sauce salted Hickey nuts
 First Lady fingers polio peaches

BEVERAGES

gin physio tea strap patientade
 Roosevelt campagne

Coffee will be served in the Brace Shop

En Route to A. B. Land November 27, 1934.

HORS D'OEUVRE

quadriceps on toast tibial tidbits
 miscellaneous biceps
 tibial torsion canape a la jambe

SOUPS

creme Carpenters bouillon a la Bussey

FISH

triceps a la financiere
 eels a la tendo Achilles with sauce Palermitaine

ENTREES

Holton cakes with Tabel syrup
 Rau Penling a la meuniere