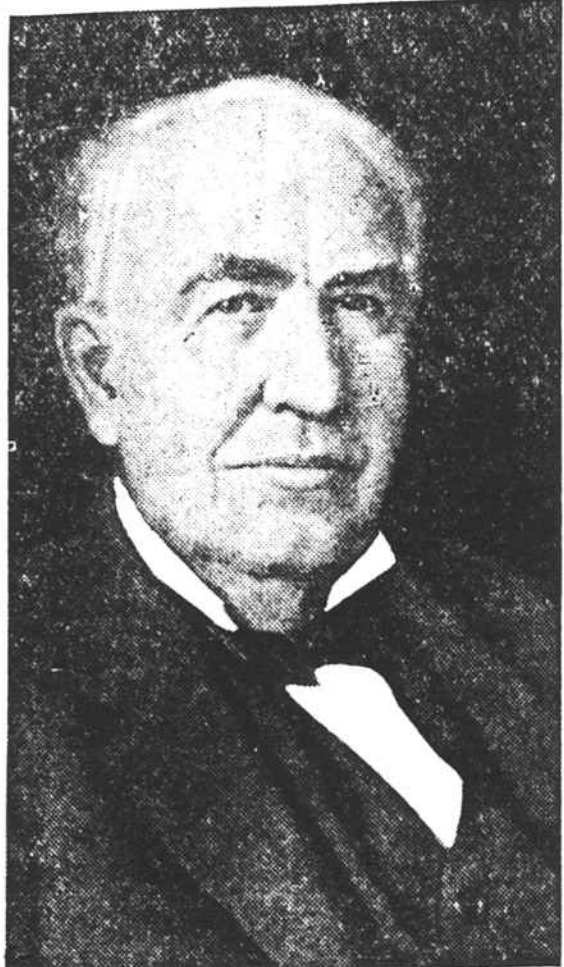


THE SCREEN: ITS AMAZING HISTORY

No One Took the Early Films Seriously, Not Even the Inventors

Thirty-seven years ago there were no moving pictures. Today the movie industry ranks fourth in the United States, with an invested capital of \$1,500,000,000, employing more than 500,000 persons in production, distribution and exhibition, with 60,000,000 persons paying from ten cents to two dollars for weekly admissions to theaters, large and small, dotting towns and cities throughout the country.

By PROEHL HALLER JAKLON
ROOM Five of the West Orange (N. J.) laboratory of Thomas Alva Edison buzzed with excitement on the morning of October 6, 1889. Two men, one young, the other older, were keenly interested in a black wooden box about five feet high. Near the top was a peephole, and the young man, with an air of triumph, urged the older man to peer into the small opening.



Thomas Alva Edison, inventor of the motion picture film, the camera and the Kinetoscope—the technological foundation of the art of the motion picture. (Courtesy Simon and Schuster.)

Inside an arc light spluttered. There was a noise of machinery, and there came into view a transparent strip of celluloid bearing the prints of many photographs. As the strip began to move, the photographs came to life. It was a moving picture of the younger man, walking, smiling, hat in hand, approaching as if to extend a greeting.

As he came nearer there was heard the phonographic reproduction of the young man's voice, saying: "Good morning, Mr. Edison. Glad to see you back. I hope you are satisfied with the kinetograph."

This was the remarkable demonstration which greeted Edison upon his return from the Paris exposition. The proud young man was William K. L. Dickson, an Englishman who five years before had come to study under the tutelage of the Wizard of Menlo Park. Edison had entrusted Dickson with the development of certain ideas, and this was what the young man had to show for his labors.

The Motion Picture Is Born

The birth of the motion picture is marked officially by this demonstration. From this crude beginning, in less than thirty-seven years it has attained the importance of a major industry, providing employment for more than a million persons throughout the world, and giving entertainment to more than 100,000,000 persons weekly in every civilized and many uncivilized lands.

Following the formula that the time to write history is while it is happening, an American, intimately acquainted with the film industry, has produced, after five years of careful, intelligent research, a two-volume history which bears the title, "A Million and One Nights: The History of the Motion Picture." He is Terry Ramsaye, former newspaper man, screen editor and executive. The original edition, of which there were only 327 sets, each bearing the autograph of Thomas A. Edison, and selling for \$75, was launched by Simon & Schuster, those two young men whose success with the cross-word puzzle books started the publishing world in 1924.

Mr. Ramsaye set out about six years ago in search of his material. The pursuit took him to all sections of the United States and many parts of Europe. Dickson was found living in retirement in France. He interviewed the real inventor of instantaneous photography on Cape Cod. In all he talked with more than 400 individuals who contributed to the growth and development of the art. Court and corporation records were made to give up their stories, while letters and original papers were still available, as they may not be to a later historian.

Starting as far back as he could go, Mr. Ramsaye traces his picture history from Aristotle to Edison. He shows us the camera obscura, the magic lantern, Stamfer's whirling disks, the spinning coin of Herschel, but the two most important developments, he says, were the camera by Daguerre, the Frenchman, in 1820, and the inception of wet-plate photography in 1830.

To Settle a \$25,000 Wager

The credit for the discovery of instantaneous photography is given to John D. Isaacs, a civil engineer, working for Ireland Stanford in 1872. Stanford maintained that artists were all wrong in their pictures of horses in action. Their legs were shown in unnatural positions, he declared, and made a bet of \$25,000 that he was right. He engaged a San Francisco photographer, Eadweard Muybridge, who later received the glory, to catch a trotting horse in action by employing a battery of cameras. Muybridge failed. Isaacs, knowing something about photography, realized that the lens shutters then in use were too slow for the job, and so he attached rubber bands with a hundred-pound pull to the shutters. This gave an exposure of one two-thousandth of a second and "caught" the motion of the horse. Muybridge, who was the photographer, gained the fame.

Isaacs went on about his own business, attaining success, and rarely referred to the incident. Later the task performed by the battery of cameras was done much more efficiently with a single camera, a spring taking the place of the rubber bands. In 1886 LePrince, a Frenchman living in the United States, used sensitized strips of paper in place of the old-fashioned wet plate, and soon after Carbutt substituted celluloid for the paper. George Eastman, a photograph supply man of Rochester, N. Y., produced much thinner celluloid strips and put them on the market in the form of dry plates for his kodaks. Dickson, in September, 1889, bought a small supply for use in the kinetoscope, as Edison called his new device.

Edison sold the exploitation rights to this device to a firm consisting of Norman C. Raff, a western capitalist; Frank Lombard, president of the North American Phonograph company, and Frank Gammon, a high-powered young business man. In turn, they marketed state and foreign rights to their toy. Edison, at his West Orange laboratory, agreed to produce the pictures.

Edison obtained a patent on his kinetoscope in 1891. Learning that foreign patents would cost about \$150, he told his attorney that they were not worth it. A patent more or less meant nothing to Edison. He failed also to protect his invention for a disk record for his phonograph, preferring the cylinder type. How many millions were lost because of this neglect can only be guessed at.

The first motion-picture actor in the world, according to Mr. Ramsaye's findings, was one Fred Ott, a mechanic in Edison's laboratory. He dressed in absurd clothing and made funny

First Movie Actors Worked for Joy of it or for the Free Advertising

these days can be measured by a review of a Biograph catalogue, then current:

134—The Pretty Stenographer; or Caught in the Act—7 ft.—An elderly but gay broker is seated at his desk dictating to his pretty stenographer. He stops in the progress of his letter and bestows a kiss on the not unwilling girl. As he does his wife enters. She is enraged. Taking her husband by the ear she compels him to get on his knees. The pretty stenographer bursts into tears.

They Use the "Cutback"

"The Life of an American Fireman," produced in 1902, was one of the first pictures to utilize that very effective device, the cutback. It showed a child in a burning house, with the brave fireman on his way.

In 1903 Adolph Zukor, a Chicago furrier, arrived in New York to collect \$3,000 which a friend had borrowed to start a penny arcade. It was not prospering, and Zukor's efforts to save his money put the furrier into the penny arcade business, and later led to his meeting with Marcus Loew, another penny arcade. By 1906 Zukor was a full-fledged theater proprietor. Famous Players-Lasky corporation, the world's biggest movie concern, resulted, while Loew is head of the Metro-Goldwyn-Mayer company, a close rival.

Carl Laemmle, clothing store clerk of Oshkosh, Wis., in the winter of 1905 confided to a Chicago advertising agent that he was tired of the clothing business. They talked over the possibilities of the movies. Finally he opened a theater in 1906. A few months later he started a film exchange and sold prints to other showmen. Out of his subsequent efforts to organize the independent interests in their fight against Edison came the Universal Pictures. Both Laemmle and Cochrane, the advertising man, made fortunes.

In 1907, the censorship pot, long simmering, boiled over. Ramsaye recalls for us the Chicago Tribune editorial, "The Five Cent Theater," which damned the nickelodeon up and down hill. At that time Chicago had 119 such shows. They were blamed for juvenile crime, and a list of pictures, to which objection was taken, was printed. The same year New York officials became aroused and closed every 5-cent show in the city. Exhibitors protested, there was a compromise, and as a result the National Board of Censorship was formed. The first state to pass a censorship law was Pennsylvania in 1912.

Appealed to "Rough Element"

The cinema, it seems, had been in bad odor, more or less, from the start. Its appeal, its critics asserted, was mainly to the "rough element." Then, too, followed the theater disasters in which many persons lost their lives. Films often caught fire in the crude projection machines, and many persons feared to enter such theaters because of the reported danger to their lives. Everyone had heard of the Charity Bazaar fire in 1897 at Paris. Nearly 180 persons, among them many French nobles, had lost their lives when a projector lamp exploded. Prejudicial feeling immediately arose to impair seriously the status of the screen in the minds of the upper classes.

With the establishment throughout the country of many theaters there was created a demand for more and better films. People were tiring of the old run-and-hop variety of subjects. Exhibitors wanted story pictures, and the producers' problems began anew. The motion picture had no respectability then, and actors were scornful. It was necessary to seek out the hungry ones and tactfully suggest work in "the pictures."

Actors who met on the movie stages of Edison, Vitagraph and Biograph in those days kept their film "shame" a secret. It was the accepted practice of the time to impress the actors into service as carpenters, scene painters, and the like. Florence Turner, an early favorite, when not acting was mistress of the wardrobe. But when Maurice Costello went over to Vitagraph from Edison a precedent was set up. "I am an actor and I will act—but I will not build sets and paint scenery." He won on his dignity.

Enter Charlie and His Pants

Charles Chapman made his screen debut in 1913. His big pants and curious gait caught the eye of Adam Kessel of the New York Motion Picture company, who strolled into a theater just in time to see the act go on. Kessel offered him \$75 a week to appear in the films. Charlie refused it, as he did a subsequent offer of \$100 a week. Finally the ante was raised to \$150 and he accepted. His first picture was made at Los Angeles for Keystone. It was called "The Kid's Auto Races," and made a hit. Other Chapman pictures followed, and the little Englishman became famous before his name was known. Later his name was changed to Chaplin.

Of the later developments in the industry, the most significant was the effort to avoid censorship and regulation that might seriously interfere with progress. In 1917 a wild party for Fatty Arbuckle in Boston drew unfavorable attention both to the players and film officials who attended it. In 1921, Arbuckle with other movie people smashed into a screen scandal. The divorce of Mary Pickford from Owen Moore in Nevada was another cause of scandal because of her early marriage to Douglas Fairbanks, an actor just winning public favor. The producers felt that something had to be done. They formed an association of motion picture producers, and placed at the head of it Will Hays, one-time chairman of the Republican national committee, and postmaster general.

Hays tackled his job seriously, and is now the screen's most powerful figure when it comes to deciding on what may be shown. He can kill any story and can exile any actor from the screen. And he has used this power.

Mr. Ramsaye has brought his fascinating history down to the separation of the producing department from the exhibiting department of the Famous Players organization. Balaban & Katz of Chicago took over the theaters. On June 5, 1920, Famous Players bought them back.

This present article mentions only scattered gleanings from the eighty-one chapters of Ramsaye's work. For one incident set down here there are scores of equally interesting ones gathered in the two volumes. The one thing about this history which appeals perhaps more than any other single quality is the attitude of the historian. His face was not long and stern when he wrote. He saw the human side of this comedy-drama. He had a twinkle in his eye.

Plans to Open Up Old Indian Mounds

With the departure for the Louisiana coast of Henry B. Collins, Jr., ethnologist, the Smithsonian Institution initiates an exploration of an almost forgotten area of prehistoric life on this continent. The region, which extends westward from New Orleans, was the camping ground of the Attacapa and Chitimacha Indians. It has been overlooked by archeologists and nothing has ever been written about it.

Mr. Collins, who is assistant curator of ethnology in the National museum, and whose expedition the bureau of ethnology is financing, will investigate the mounds in the area with a view to determining whether they are true mounds or mere shell heaps, and to collect bones, artifacts and pottery. So far all the pottery found along the Gulf from Florida to Louisiana has been similar, indicating a cultural relationship among the peoples and suggesting a migration route.

The Attacapa Indians were one of the few known cannibal tribes of the American continent. Whether they engaged in the practice for ceremonial purposes or for the love of it, is not known. Other cannibal tribes were found in Cuba, Jamaica, Venezuela, Columbia and Brazil.—From a Bulletin of the Smithsonian Institution.

Seven radio beacons have been established on the Great Lakes.

Something They Didn't Say

She had urged him to study the correspondence course at home, and he had—just as the advertisements said. At last his salary was raised \$50 a month—also just as the advertisements said.

AROUND THE HOUSE

A full-length mirror is one of the home dressmaker's foremost assistants.

Use of Pectin in Making

The use of pectin in making jellies is not always understood. Pectin, sugar, and acid in the right proportions are necessary in making jelly. Adding pectin to the fruit juice may be helpful for several reasons. Delicious jelly can thus be made from the juice of peaches, cherries, strawberries, and other fruits that do not naturally contain enough pectin. Also the housekeeper can be more sure of success and of a jelly of just the right texture. Color and flavor, too, can sometimes be improved because the juice need not be boiled so long in order to reach the proper degree of concentration. The process is therefore, shortened and the housekeeper relieved from some of the hottest and most tedious part of jelly making by the right use of pectin extracts.

Use of Pectin in Making Jellies Not Understood

When peptin is added to watered juices to conceal their poor quality, the jelly has low food value and flavor.

Buy Milk in Bottles

The best way of buying milk is in bottles. In this form it can be kept clean and cool more easily during delivery and is much more convenient to handle. Dipping milk from large cans and pouring it into customer's receptacles on the street exposes it to dusty air and is bad practice.

Have a lovely complexion

You can make a lovely complexion as lovely as the picture above is a good complexion and will give you health deep.

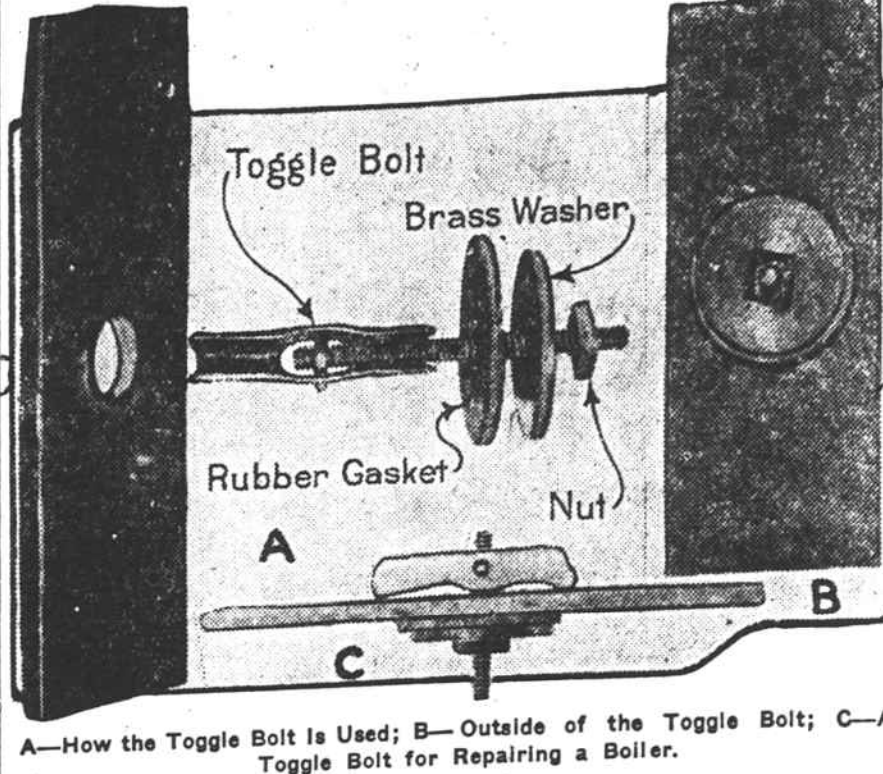
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STOP SMALL LEAKS IN PIPES AND TANKS



A—How the Toggle Bolt is Used; B—Outside of the Toggle Bolt; C—A Toggle Bolt for Repairing a Boiler.

(Prepared by the United States Department of Agriculture.)

A small leak in a water pipe can be stopped in emergency as follows, according to the United States Department of Agriculture, in Farmers' Bulletin 1490, "Simple Plumbing Repairs in the Home." Place a flat rubber or leather gasket over the leak and hammer a stiff piece of metal, such as a picture hook, to fit over the gasket; secure both to the pipe with a vise or clamp obtainable at hardware or five and ten-cent stores. A small leak under low pressure is sometimes stopped by embedding the pipe in richly mixed portland cement mortar. It is necessary to shut off the water from the pipe and build a boxing around it to hold the soft mortar closely against the pipe. Broken sewer pipe can be repaired in like manner. A wrapping of wire netting embedded in the mortar increases its tensile strength. A small hole in cast-iron pipe may be tapped with a screw plug.

Leaky Screw Joint

Where a leaky screw joint cannot be tightened with a pipe wrench, the leak is sometimes stopped by a blunt chisel or corking tool and hammer. Sometimes a crack or hole is cleaned out and then plugged with a commercial iron cement to the consistency of putty. Sometimes a pipe band with two bolts, or a split sleeve is employed to hold a thin coating of iron cement or a gasket over a leak. If the leak is at a screw joint, the band is usually coated inside with one-eighth inch of iron cement and then slipped over the pipe. Keeping the bolt farthest from the coupling or fitting a little tighter than the other, both bolts are tightened. During the tightening the band should be driven with a hammer snugly against the coupling or fitting.

In addition to these methods and devices, there are several kinds of good, inexpensive, ready-made pipe

and joint repairs obtainable of manufacturers and dealers.

Leaky Spot in Tank

A corroded and leaky spot in a steel tank or range boiler can be closed with an inexpensive repair bolt or plug obtainable from dealers. The picture shows a homemade repairer consisting of a three-sixteenths by three-inch toggle bolt costing ten cents and a flat rubber gasket, brass washer and nut. The link of the bolt, after being passed through the hole, takes an upright position, and screwing up the nut forces the gasket tightly against the outside of the boiler. A small hole must be reamed or enlarged with a round file to a diameter about five-eighths inch. The metal beneath the gasket should be firm and clean. A little candle wick packing may be wrapped around the bolt to prevent leakage along the bolt. Sometimes a hole is closed by driving in a tapered steel pin to turn the metal inward, forming a surface which can be tapped for an ordinary screw plug. A hole in the wall of a tank or pipe having considerable thickness can be easily and quickly closed by screwing in a tapered steel tap-plug which cuts and threads its way through the wall. These plugs in different sizes are obtainable of dealers, and a monkey wrench is the only tool required to insert them; it is unnecessary to shut off or drain the water from the tank or pipe.

Leaky Tank

A small leak at a seam or rivet can often be closed by merely rubbing a cold chisel along the beveled edge of the joint. Do not attempt to caulk a seam unless the plates have considerable thickness and the rivets are closely spaced and are close to the calking edge, and then use extreme caution. Run a regular calking tool or blunt chisel along the beveled edge; tapping the tool very lightly with a light hammer, force the edge of the upper plate against and into the lower plate.

FRESH ASPARAGUS BEST FOR CANNING

"Hot-Pack" Method Favored for Vegetables

(Prepared by the United States Department of Agriculture.)

If you have an abundance of tender, fresh asparagus in the garden you will undoubtedly want to can some of it for later use. As the asparagus ought to be canned as quickly as possible after it has been cut, plan to do a little of this work frequently, rather than to attempt a large amount of canning at any one time. Use the pressure canner, and the "hot-pack" method, which is recommended for all vegetables and many fruits by the United States Department of Agriculture. The point about the "hot-pack" method is that the material to be canned is heated to the boiling point or cooked a short time before being put into the can or jars, so that in the shortest possible time the temperature of the whole jar is raised to the required point. This results in more certain sterilization and a better product because of the shorter cooking.

Asparagus may be canned whole, or cut up in half-inch lengths. In the former case it is tied in uniform bundles, cut to fit into the container to be used, and placed in a saucepan with boiling water over the tough lower portion. The saucepan is covered tightly and boiled 4 or 5 minutes, then the asparagus is packed rapidly into the containers. In the latter case the cut asparagus is brought to boil in water to cover, and then packed in jars or tins. The containers are completely filled up with boiling water, and each jar is salted in the proportion of 1 teaspoonful of salt to each quart canning.

The jars or cans are put into the hot canner as soon as they are filled and processed for 40 minutes at 10 pounds pressure, or 240 degrees Fahrenheit. Glass jars should have the springs and rubbers adjusted halfway, or screw tops placed on loosely. Tin cans are completely sealed before being placed in the canner. After processing for the required length of time, remove the containers from the canner. Seal glass jars at once. Place them out of drafts. Cool tin cans by plunging them in cold water. Keep all canned products under observation at room temperatures for at least a week. Discard any showing signs of spoilage and watch others of the same lot until it is certain that they are keeping.

Use of Pectin in Making

Jellies Not Understood

The use of pectin in making jellies is not always understood. Pectin, sugar, and acid in the right proportions are necessary in making jelly. Adding pectin to the fruit juice may be helpful for several reasons. Delicious jelly can thus be made from the juice of peaches, cherries, strawberries, and other fruits that do not naturally contain enough pectin. Also the housekeeper can be more sure of success and of a jelly of just the right texture. Color and flavor, too, can sometimes be improved because the juice need not be boiled so long in order to reach the proper degree of concentration. The process is therefore, shortened and the housekeeper relieved from some of the hottest and most tedious part of jelly making by the right use of pectin extracts.

Strawberry Sauce

A few strawberries can be made to go a long way by making a sauce as follows: Make a hard sauce from one-third cupful of butter, one cupful of powdered sugar, and the stiffly beaten white of an egg. Crush two-thirds of a cupful of fresh strawberries and heat gradually into the hard sauce. This may be slightly warmed over hot water. The acidity of the berries may cause the sauce to separate somewhat, but this does not affect the flavor.

Vitamines and Minerals

Oranges are a rich source of vitamins and minerals. Children need a constant and abundant supply of these things in their food to help them grow and develop normally. Oranges also have the advantage that they can be given between meals without spoiling the appetite for other foods at the regular meal times. In fact they seem to sharpen rather than dull the appetite.

Buy Milk in Bottles

The best way of buying milk is in bottles. In this form it can be kept clean and cool more easily during delivery and is much more convenient to handle. Dipping milk from large cans and pouring it into customer's receptacles on the street exposes it to dusty air and is bad practice.

AROUND THE HOUSE

A full-length mirror is one of the home dressmaker's foremost assistants.

Heat turns white silk yellow. Avoid both hot water and hot irons when laundering silks.

A border of flowers around the vegetable garden will pay for itself in the pleasure it gives.

Use of Pectin in Making

Corn meal is useful for taking out grease stains on rugs. Rub the meal into the stain, using a fresh supply as it absorbs the grease.

Attractive and inexpensive table runners can be made of crash toweling. They give a summer touch to the luncheon or supper table.

Fresh pineapple and strawberries make a combination worth trying, whether as a breakfast fruit or as a dessert for dinner or supper.

WHITE AS COTTON

FACE NOW RADIANT

Says Mrs. Wolcott: "Terrible Aches, Pains, Sour Bile Sickness, Constipation, etc." Like Mrs. Wolcott's, your face is as white as cotton. She says she was ailing, that her face was as white as cotton. She was ailing, that her face was as white as cotton. She was ailing, that her face was as white as cotton.

Can you solve this?

WIN A BUILDING LOT

Demand for American

The demand for American goods is increasing. Buy American.

Mother! Give Baby This Safe and Harmless Laxative

The first two years of life are the most trying of a baby's. It is essential that the baby's diet be such as to keep the bowels regular and free from constipation. This safe and harmless laxative will give you a healthy baby well and will greatly reduce your anxiety.

FREE! SEND FOR THIS

TEETHING

Builds Better Babies

Reportorial Error

Official stenographers are set down that Daniel E. Hall, District of Columbia attorney, that Commissioners Barrett and "stopped in result" the report.

Don't Forget Cuticura

When adding to your toilet powder an exquisite face skin, tanning powder and perfume, you other perfumes superfluous. Rely on it because one of the Trio (Soap, Cuticura and) 25c each every where.—Advertisement

Have a lovely complexion

You can make a lovely complexion as lovely as the picture above is a good complexion and will give you health deep. HANCOCK Sulphur Compound