

THE AMAZING INSIDE STORY OF HOW THEY MADE "SNOW WHITE"



BY KIRTLEY BASKETTE

TWENTY-FIVE years ago in Kansas City, Missouri, a small boy sat enchanted in a theater and watched a fantastic little play. When he left, his head whirled with the magic and romance of what he thought was surely the most wonderful story in the world.

That is how "Snow White and the Seven Dwarfs" really began. Because that was the name of the fantastic little play the boy saw. And the name of the boy was Walt Disney.

For a score and more years, far back in his brain those same visions whirled and survived. The impression never vanished, though the boy grew up. And as he grew to be one of the greatest artists in the world, the insistent memories of childhood rapture demanded to be translated into his particular art. They grew into a dream.

Three and a half years ago, Walt Disney started to make his dream come true. In those

three and a half years he spent \$1,500,000 to bring "Snow White and the Seven Dwarfs" to the screen in exquisite color symphony. He employed 569 people who worked all day and frequently all night to finish it. He spent \$70,000 developing a brand new camera to give it depth. He concocted 1500 different paints to give it unmatched color, and used enough to paint twenty-two five-room bungalows. He threw away four times the drawings he made and the film he shot. He made over 2,000,000 separate paintings that, placed end to end, would reach from New York to Pittsburgh. He used pencils that, stacked point to point, would tower above Mount Everest.

He tested hundreds of people for faceless voices on the screen. He maintained a studio menagerie so that he might study animals within reach of pencil and paper. He spent months searching for new sound effects. He developed brand new techniques in music, drawing, animation and color photography.

And all this work, this experimentation, for one hour and twenty minutes on the screen.

The story of the making of "Snow White and the Seven Dwarfs" can be told now. The film is finished, and it is delighting the world. It has pried open an impressive crack in the door that leads to the screen's ultimate promise. It was worth the time, the work, the worry, the courage, the tedious experimentation, the money. And the risk.

For at first Walt Disney received scant encouragement from his seasoned helpers when he casually introduced the idea of making "Snow White." It was a new departure for animated cartoons. It had human beings that had to be convincing. It was feature-length, and two reels was the limit for screen animations. It had death in it. It had horrifying scenes that might frighten children. Its expense was appalling. If it flopped, Disney's career might well be wrecked.

But in the wonderful way Walt Disney has of transmitting enthusiasm to his co-workers he "sold" the idea around his own studio. That was all that was necessary. When Disney's

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studio gets an idea on the brain it never escapes until it's done. Roughs, layouts, snatches of tunes, bits of business, gags and ideas for effects soon showed up on tablecloths, backs of envelopes, telephone pads and old magazine covers. And "Snow White" was in work, although two years were to pass before ever a foot of film was exposed.

Disney planned to follow the Grimm fairy tale closely, leaving out only some of the more gory Teutonisms. The rights were in the public domain but a play existed. He bought it for protection but used nothing in it. He didn't want anything to constrict the imagination of his studio staff and himself.

DECIDING on the characters was the first and one of the hardest things. How they should look, talk, react, what their personalities should be, their colorings, their mannerisms and peculiarities. Every character in the picture was changed about and recreated a dozen or more times—so often, in fact, that the staff became so sick of the seven dwarfs, that they were going around advising that the amount of time the dwarfs consumed in the picture be cut down at every possible point.

Dopey, for instance, started life as a broad, grotesque clown with a wide mouth, big eyes and an imbecilic expression. He was also old, like the rest of the dwarfs. In the "sweatboxes," as projection-room conferences are known at Disney's, he didn't click. So they made him boyish and appealing. They gave him a small mouth, innocent blue eyes and wind-wing ears. They put oversize hand-me-downs on him. And, of course, he stole the picture.

Grumpy was irritatingly tough and nasty at first. He had to be sweetened up. *Doc's* hands waved around like Hugh Herbert's too much. He was stealing all the scenes. *Sneezy* was originally *Deefy*, a deaf dwarf. Walt Disney decided that wouldn't do; deaf people might take offense. But a sneezer can't be very tragic. *Snow White* turned up too young; they had to re-do her with enough years to make love convincing. And the wicked *Queen*—experiments on her lovely cruel mouth and eyes alone represent drawings enough to paper a house.

All the animal actors moved bodily right into the studio, in cages, pens and corrals. Artists carried birds into their offices and studied them. Raccoons strolled around in the sun while their pictures were taken and their movements sketched. Pigeons, deer and rabbits gave up the secrets of their private lives and idiosyncrasies. Even the poor turtle, who took it on the shell all through the picture, ambled between busy ink pots for his portrait sitting. He's still around the lot, by the way. Right now he carries a sign, "Traffic Department," meant to be a sharp dig at the studio messenger service.

WHEN a pretty accurate idea of each character formed in the minds of Walt Disney and his staff, casting started. Casting an animated cartoon is always exasperating, because real personality in a voice is rare stuff, indeed. But in "Snow White" just the right amount of everything had to be uncovered. It was a job extending over a year.

Radio stations were canvassed, voice schools culled, advertisements printed, and hundreds of girls auditioned before *Snow White* was found. She was the toughest problem of the lot because she had to be sweet but still unreal. Un-

trained, but pleasing. She had to speak and sing both. Deanna Durbin, before she became famous, was tested—and turned down. Her voice, oddly enough, was too fine, too mature.

Finally an unknown girl, Adriana Caselotti, whose father is a well-known Hollywood singing teacher, became *Snow White's* voice.

The next toughest character to cast was, oddly enough, one who spoke only four lines—the *Prince*. He was the last one cast, too. Because he was a pretty beautiful young man he had to be balanced by a robust voice. Robert Stockwell, an established radio and screen actor, finally got the nod. The *Queen* and the witch she changed to were the same person, Lucille LaVerne, the famous stage actress. The magic mirror was Moroni Olsen, and you've seen him a lot in the movies. The dwarfs were mostly old time comedians. Billy Gilbert, of course, was *Sneezy*—you probably recognized his old act. Eddie Collins, a burlesque comedian, came out from Los Angeles Main Street shows to suggest some funny walks for the dwarfs.

VOICES in screen animations, naturally, are important, but stand no chance whatever of capitalizing on their breaks, when the picture is a feature. *Donald Duck's* voice, discovered first on the radio, has a steady job, and *Madame Cluck*, the operatic hen, and, of course, Walt Disney, who is *Mickey's* mouth-piece. But, in spite of the terrific success of "Snow White and the Seven Dwarfs," the voices, ironically enough, will find their work no break for better things. Disney's next features, "Pinocchio" and "Bambi," will of necessity have to cast new voices to fit new characters.

Casting voices was tough enough but really a cinch compared to casting sound effects. "Snow White" was jammed with delightful sounds. All had to ring exactly true, which doesn't mean realism. Throughout the whole picture, everybody had to keep the mood and the fantasy of the picture in mind. Thousands of rings, squeaks, squishes, and sepulchral tones were auditioned before just the right one tickled the fastidious ears of Walt Disney and his lieutenants.

Do you remember that awful squeak in the stillness when the dwarfs push open their front door? It baffled the sound department for days. Their lockers of "squeaks" (Disney's have a regular library of sounds, listed and classified) yielded nothing. One night a sound man's wife asked him to pull open a jammed dresser drawer at home. He yanked and—there was the squeak! He wasted no time; he hauled the dresser down to the studio—and that's exactly what you heard in the picture.

Maybe you remember more clearly the squishes when *Grumpy*, in his consternation after being kissed by *Snow White*, tracks out of the mud in which he has fallen. They filled a tub full of the real ooze for that and a man got in and slithered around in his bare feet. They wanted that to be the goods. But when *Grumpy* played the organ for the swing session with *Snow White* and the little men, a real organ was decreed too real. How would a dwarf's organ sound? Bottles half filled with water and blown into solved it at long last. They had to be kept in an even temperature, too. If the room got cold or warm, they changed tone and key.

For the hollow wishing-well sequence, which, by the way, was one of the last scenes filmed, though it came at the first of the picture, the echos were recorded, played through a speaker into an empty room and then re-recorded. All that to get the right effect. When the magic mirror spoke, his eerie voice actually traveled through a long tube, then shattered against a marble slab on which lay the microphone.

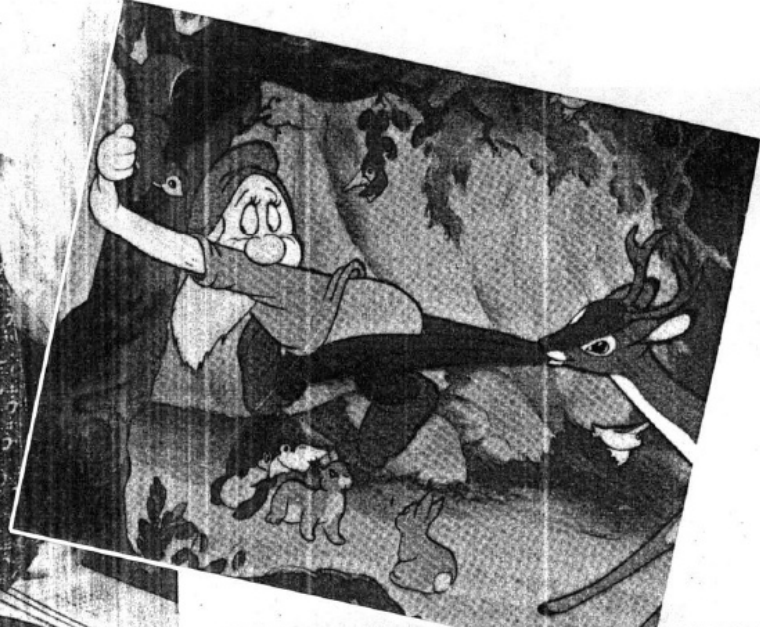
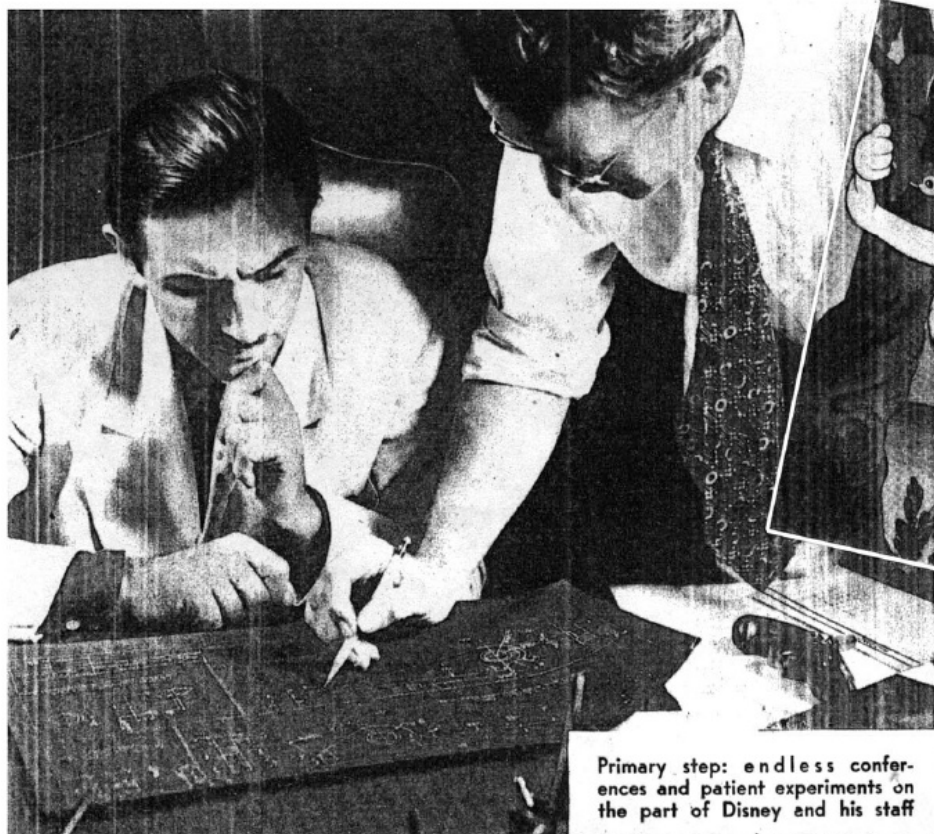
WALT DISNEY thinks perhaps the greatest achievement of his first feature cartoon was that it made people cry in places. No animated picture has ever done this before. It would not have been possible if Disney could not have caught reality where he wanted it. He realized this long ago. It spurred him to develop an entirely new animation technique.

If you know anything at all about the movies, photographic or drawn, you know the principle is illusion. In "Snow White," for the first time human beings were protagonists. Now animals, elves, dwarfs and such creatures can still remain unbelievable when humanized. But humans have to appear human, act and move that way, because human beings are watching themselves. And here is a funny thing: humans are immeasurably harder to animate. Their movements are too slow and deliberate. Animals move swiftly, nervously. Disney tried in a thousand ways to iron out the "jitters" of the *Queen*, *Snow White*, the *Prince*, the *Witch* and the *Huntsman*. The *Queen* especially was a headache. She had to be regally beautiful, with confined but graceful movements. The variation in the sharpness of a pencil's point, however, would make her wiggle!

To compensate for the faults he couldn't correct, Walt Disney developed totally new reality effects for "Snow White." One important one was depth.

Most animations are flat; that is, they have but two dimensions. But in "Snow

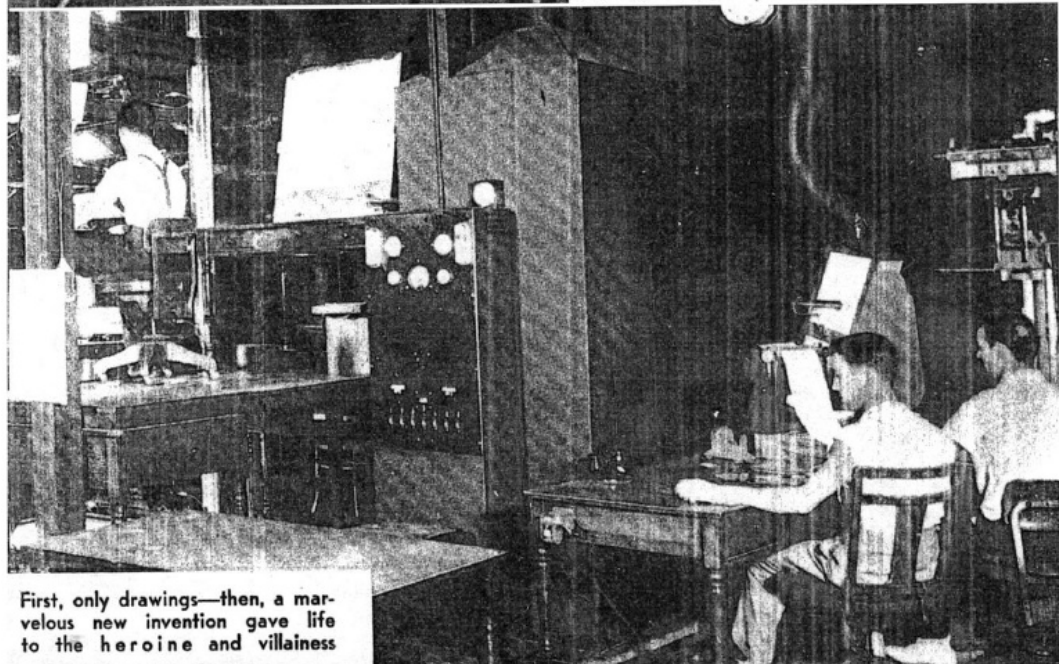
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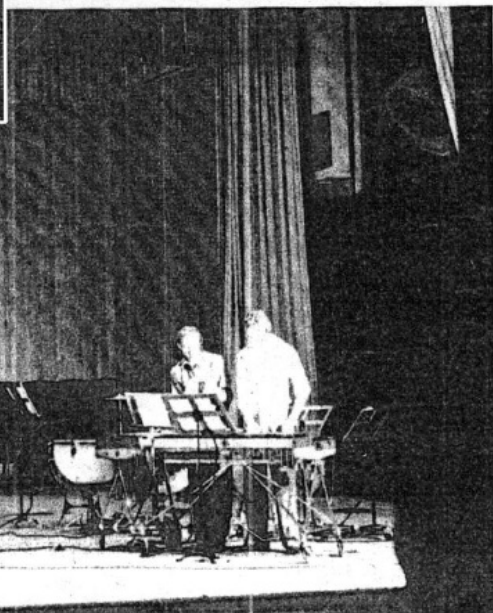
Primary step: endless conferences and patient experiments on the part of Disney and his staff



Explaining a mechanical miracle more fascinating in its unfolding than the fairy tale it gave us



First, only drawings—then, a marvelous new invention gave life to the heroine and villainess



In adding sound to the film, a unique but short career was the lot of a varied group of people

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White," in thirty per cent of the scenes, you see back "into" the picture. You see the characters pass behind objects and through them. Clouds, steam, wind and rain dim them. Distant hills actually seem distant. All that was no accident. The multiplane camera did it.

The Disney studio developed the multiplane camera at a cost of \$70,000, and countless tedious months of experimentation. Briefly, it divided the picture up into a series of planes. These were placed on transparent glass plates and lined up in order, one back of the other, then photographed. For instance, in say, the scene where *Snow White* and the animals go through the woods. On one glass plate in back would be the far sky and hills. On the next the middle ground. Then *Snow White* and the animals. And, in the foreground, the big dark trees. The camera, shooting through this row of plates—transparent except where the images and scenery were painted, and each one smaller from front to back, with the front images moving faster—gave a perfect illusion of depth. Some scenes used as many as six planes.

WALT DISNEY cast his animators like an ordinary studio casts actors. Some of his artists were better on animals, others on human beings, still others on effects. For "*Snow White* and the Seven Dwarfs" he established a new department of twenty-five men who did nothing but work on rain, wind, lightning, sun flashes, boiling soup and such. Color itself was even animated.

You must have been struck by the radiance of the diamonds, rubies and emeralds in the dwarfs' mine. Or the blinding flash on the *Huntsman's* knife as he was about to slay *Snow White*, the very real wetness of the pouring rain, the fog, the unearthly sheen of the poisoned apple.

The bright highlights finally were achieved by special paints and an "air brush" which is actually a miniature paint spray gun. It leaves no definite edges, and therefore an effect of brilliance. The shiny apple and its creation is the supreme example of Disney's triumphs in this direction. Color was so animated in this scene that it actually showed the poison boiling into the color-changing fruit in the cauldron!

Most of the paints used in the picture were opaque, pastel paints. But to gain just the right effects Disney's laboratory developed paints that looked like satin (the *Queen's* collar), paints that were as velvet as velvet itself (the *Queen's* robe), linen-effect paints (*Snow White's* skirt), and homespun (the dwarf's jerkins). They developed paints that wouldn't crack and chip, streak or bleed, that wouldn't fade quickly, that would cling to celluloid indefinitely. For some of the paintings had to be held for months. They mixed transparent paints (the bubble effects) and shiny, iridescent paints.

Shadows gave Disney's artists the greatest trouble of anything. The picture was full of shadows. Shadows from the candles of the dwarfs, from the lanterns, from the sun. Each had to be plotted realistically, not only as to perspective and form but also as to actual direction. The shadow of the *Huntsman*, for example, when he bent over *Snow White* had to be charted as of three o'clock in the afternoon. Not one person in a thousand could tell where it should be—but if it were off they'd know! Special superimposed drawings by Disney's shadow gang alone would stack up as high as a house.

The hardest sequence in the whole film, however, was where the wicked *Queen* changes into the *Witch*. Walt Disney insisted on not just showing her

change (mere child's play in ordinary animation) but how she felt as she changed! Every trick and effect developed for "*Snow White*" went into this scene. Whirling backgrounds, wind, highlights, animated color, glare, bubbles, and color mood. It is the real masterpiece of "*Snow White* and the Seven Dwarfs" from a technical standpoint, and it represents the labor of years.

But if the intricacies of advanced animation make your brain whirl—consider what the musicians had to worry about. The background music for "*Snow White*" will probably not draw as many "Ohs and ahs"—but it had plenty to do with the general effect on you.

THE whole picture, in fact, whether you know it or not, was one big rhythm. It was actually broken down into musical beats and accents. Wherever there was an accented action, there was an accented beat. Furthermore, each bar of music was fitted to each incident on the scene. If a tear fell, the music had to sound like a tear falling.

Each dwarf had his own little musical figuration worked into the music when he took the center of the attention. A little syncopated construction that went off-beat and etched *Dopey* or *Doc* or *Grumpy* on your consciousness, in collaboration with the camera. Maybe you thought you were catching *Dopey* out of the corner of your eye when the gong lit on his head and he ankleed off the scene in that unforgettable Chinese burlesque. But the camera was moved down on that, unnoticed by you, and so was the music.

ALL the songs were written three years ago. They weren't composed with an eye to commercial release, although orchestras everywhere are now arranging and playing them. They were built for the picture, and each one had to carry along the action and plot. Twenty-five complete songs were written. Most of them were thrown away. Those that remained, of course, speak for themselves.

Walt Disney's studio worked so closely together in making "*Snow White* and the Seven Dwarfs" that it is impossible for any one person to take bows for any one part of the picture—even Walt himself. In fact, he would be the first to rebel at the number of

credits given him in this article. He would change the "he's" to "we's."

That is because of the constant cooperation of hundreds of workers necessary to make a masterpiece of this type. Everybody in his studio had a hand in the picture. Everybody kibitzed freely, criticised, offered suggestions. His writers were also artists, animators, lyricists. His animators were actors, directors, and gag men. His musicians were scenarists as well. And vice versa.

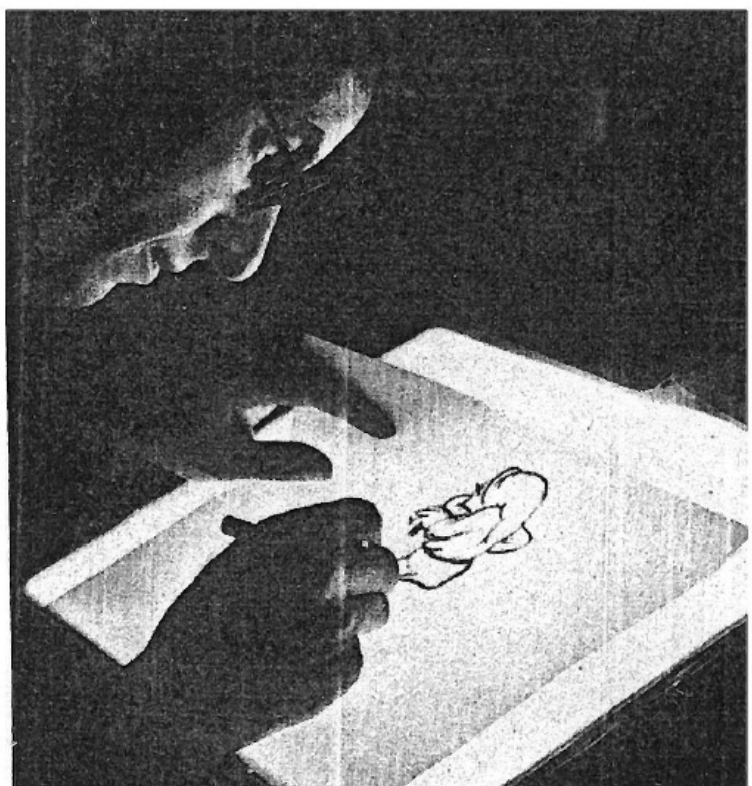
When *Dopey* played the drums in the dwarf hut hijinks, he played them because a fly was after him. A writer had to think up that routine, an artist illustrate it, an animator make it move, a musician score it, and sound men record the taps. And somebody had to say whether it turned out all right. That's where Walt Disney came in.

He held the "sweatboxes" that made the decisions after every scene from rough layout to finished film. He took the responsibilities. He guided the work. A lot more than just experimental shots and drawings went into the wastebasket. Two long completed sequences, one where the dwarfs have a soup concert and another where they build a bed to give to *Snow White*, were reluctantly snipped out to save running time. One night, 2,000 feet went at one whack. Disney had to order it, and it hurt him a lot more than it did you.

But to this mild-mannered, pleasant, unassuming thirty-six-year-old fellow who still buys his suits ready-made and is "Walt" to the errand boys at his studio, "*Snow White* and the Seven Dwarfs" is only the beginning of screen animation's promise. Already he's working on a hundred new ideas and refinements for his next features, "*Pinochio*" and "*Bambi*." A criticism after the preview in a local newspaper saying he should stick to his animals didn't make him mad, but it made him resolve to iron out the "jitters" in his people next time. Even if he has to draw them six feet high and reduce them down.

Right after that same preview a little kid snagged his arm and asked for his autograph. As Walt Disney scribbled it out, the kid said, "Well, Walt, I guess you're made now—huh?"

Walt Disney grinned. And not because he considered himself "made" long ago. But because he still didn't.



Thousands of preliminary sketches were drawn and redrawn—a few to survive, most to be discarded