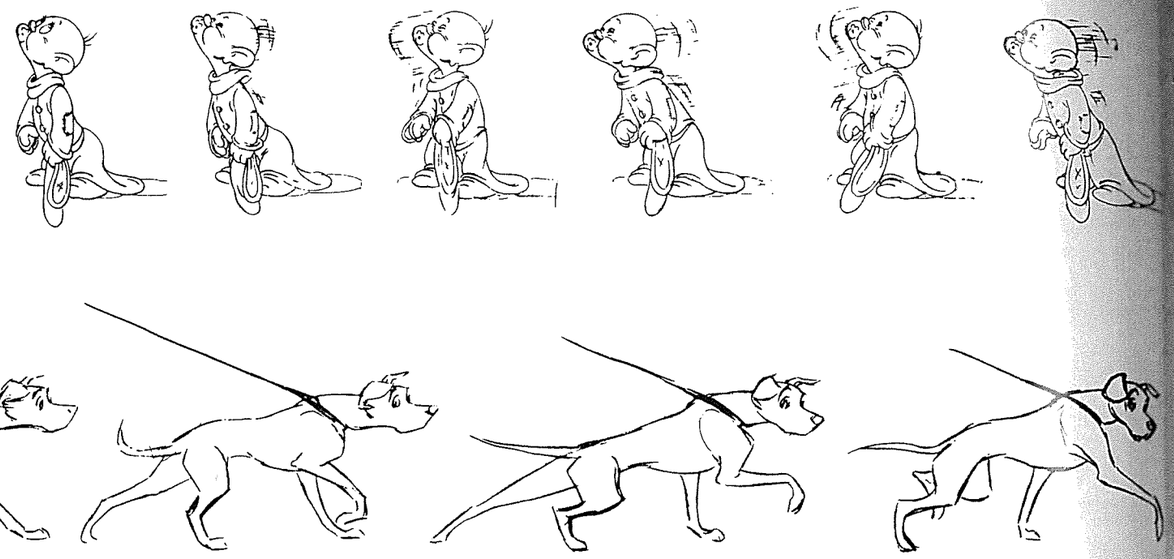
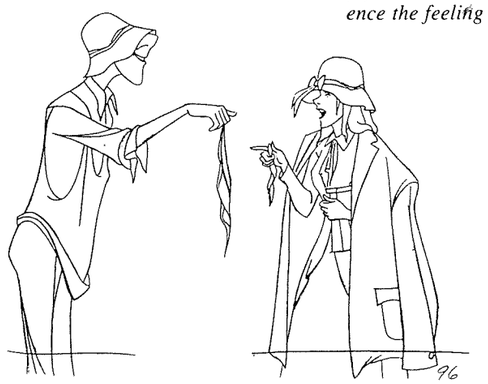


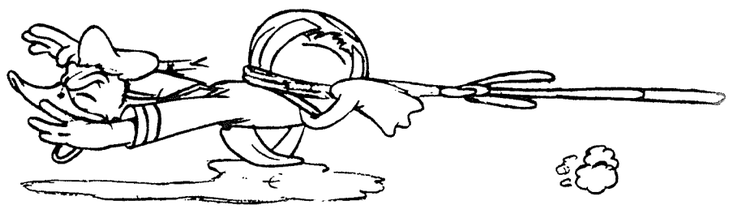
ANIMATOR: *Ollie Johnston*—101 Dalmatians.

Pongo has seen a beautiful girl with a young female dalmatian go into the park. Straining on his leash, he drags his master in pursuit of them.

(2) The elements can influence the feeling of weight.

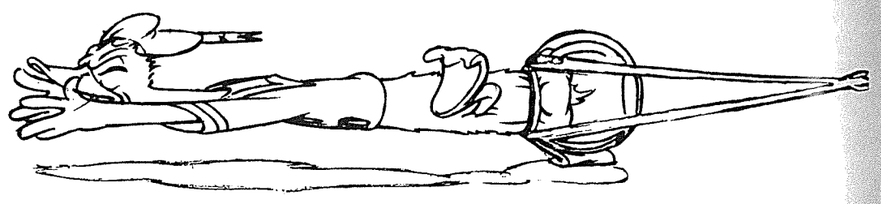


Roger and Anita, from 101 Dalmatians, *have fallen into the pond. The water has made all of their clothes heavy and limp and sagging.*

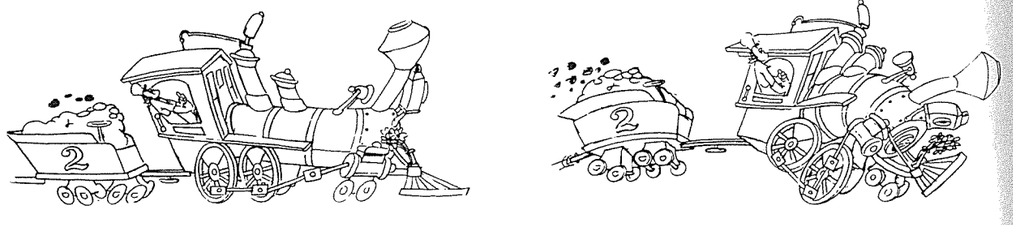


ANIMATOR: *Fred Spencer*—Moving Day.

Donald is trying to get a fish bowl off his rear by tying suspenders around it and attaching the other end to a piece of furniture. Here he is running and slipping as he reaches the full tension of the suspenders.



The weight of the engine is shown as it skids to a stop, and the added touch of the coal flying momentarily into the air helps the effect.



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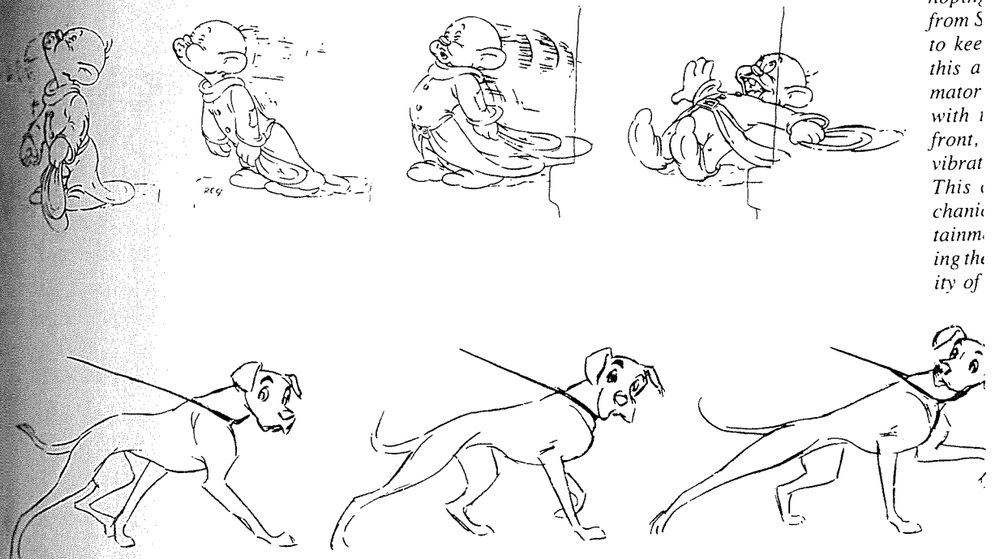
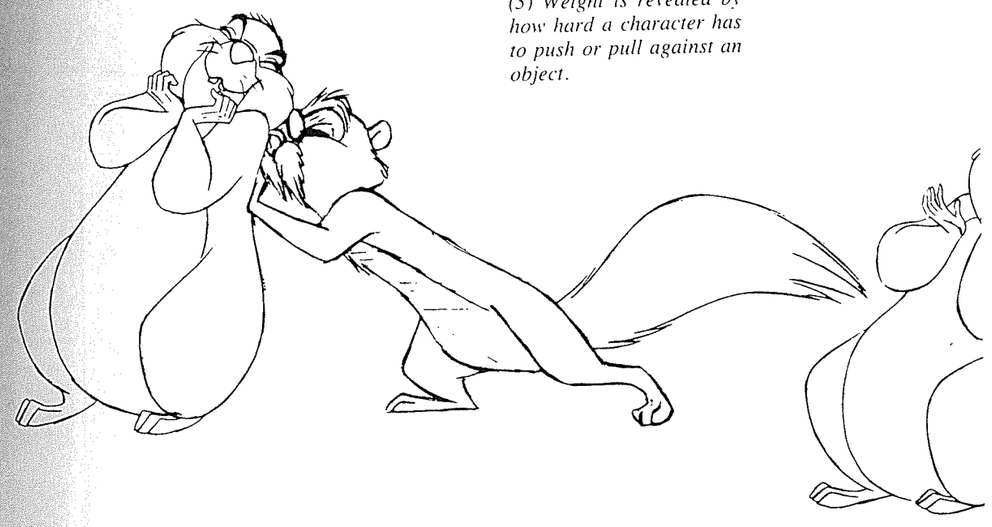
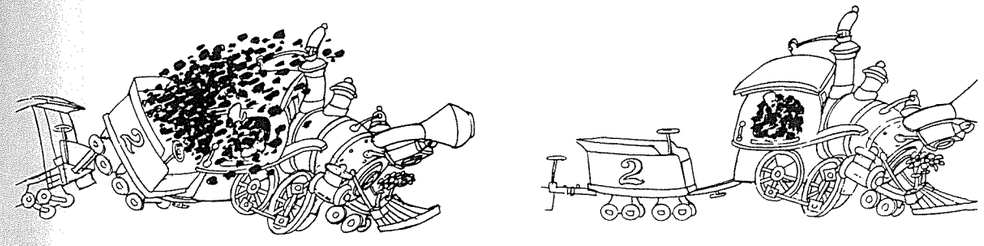
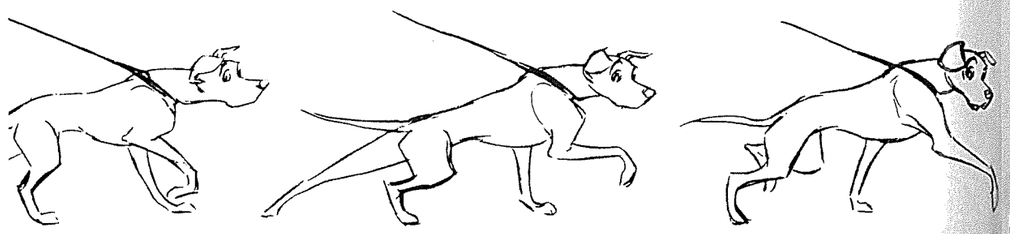


(3) Weight is revealed by how hard a character has to push or pull against an object.







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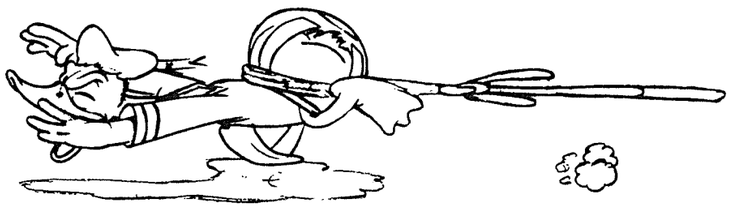

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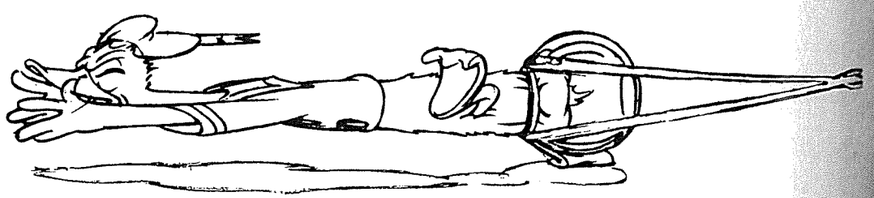
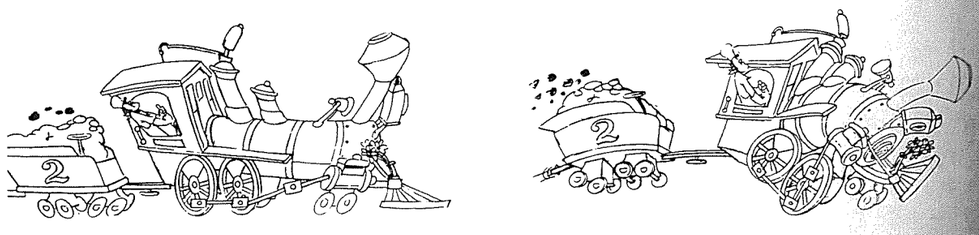
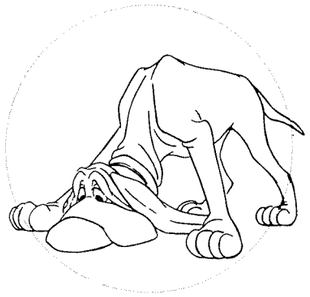




ANIMATOR: *Fred Moore*—Snow White.

Dopey zips into the scene hoping for a second kiss from Snow White. In order to keep him in balance in this abrupt stop, the animator used a cartoon slide with the feet well out in front, followed by a rigid vibration on the recovery. This caricature of a mechanical stop added entertainment without destroying the weight or believability of the character.



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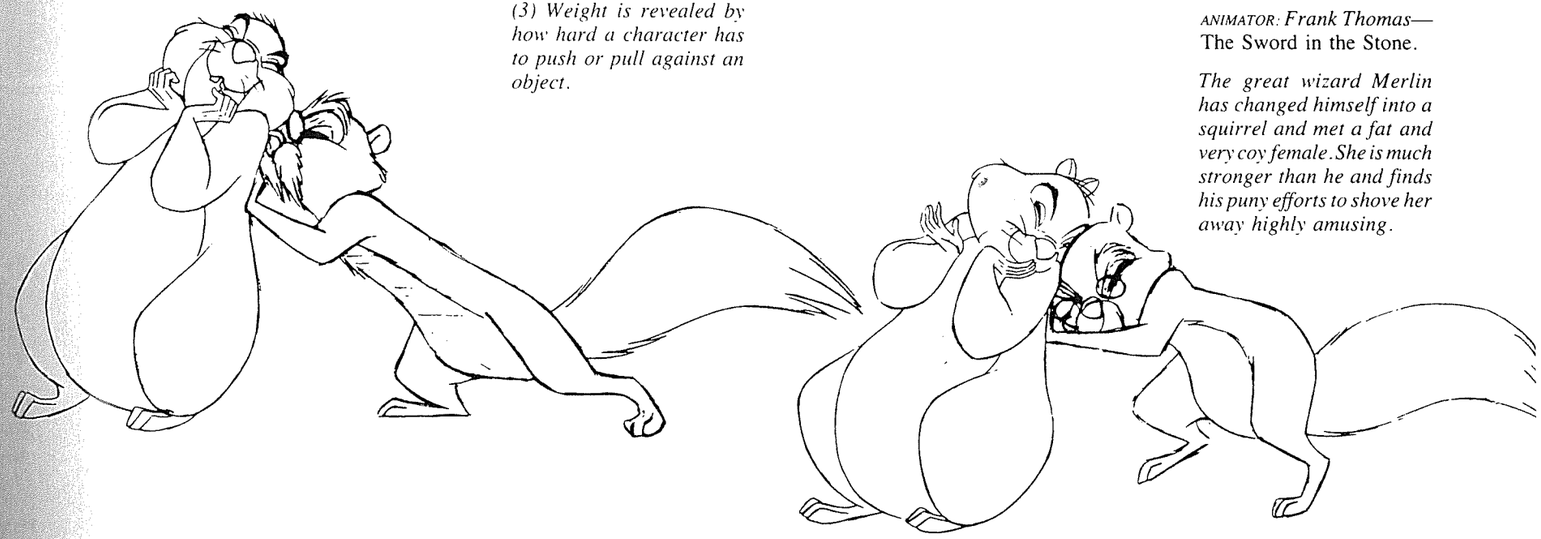
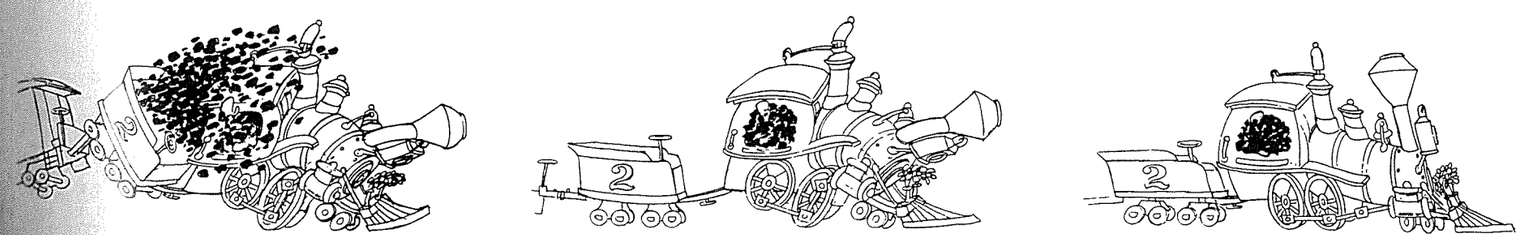
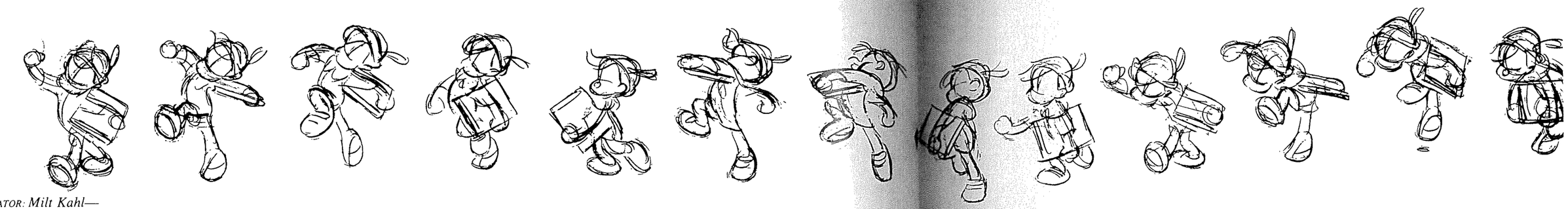


ANIMATOR: *Frank Thomas*—The Sword in the Stone.

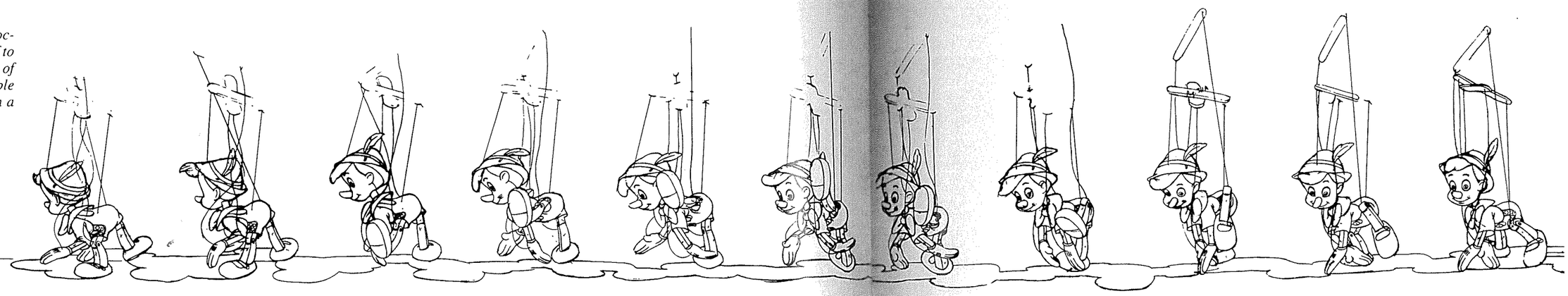
The great wizard Merlin has changed himself into a squirrel and met a fat and very coy female. She is much stronger than he and finds his puny efforts to shove her away highly amusing.





ANIMATOR: *Milt Kahl*—
Pinocchio.

The first roughs of Pinocchio happily skipping off to school show the amount of looseness that is possible in the movement of even a wooden boy.



ANIMATOR: *Frank Thomas*—
Pinocchio

Walks FOUR-FOOTED FRIENDS

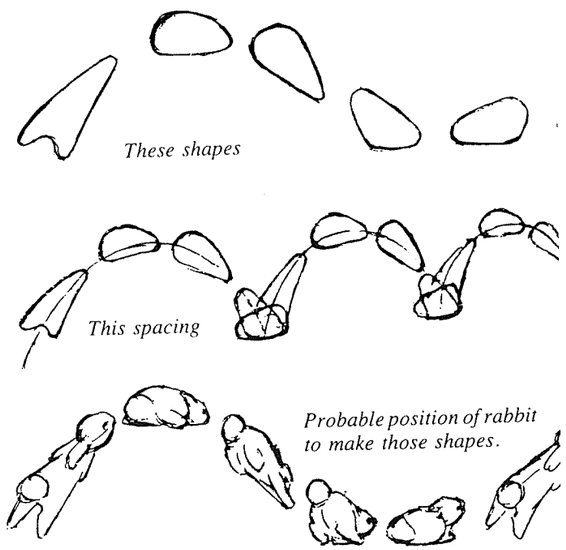
By the time we had finished our work on *Pinocchio* in 1939, the animators had done skips and runs, casual strolls, walks with enthusiasm, with tired feet, with apprehension, and with heavy-footed rage. In one scene, Jiminy Cricket even dressed himself while running full speed; and in another, Pinocchio, as a puppet, was made to simulate a walk with strings.

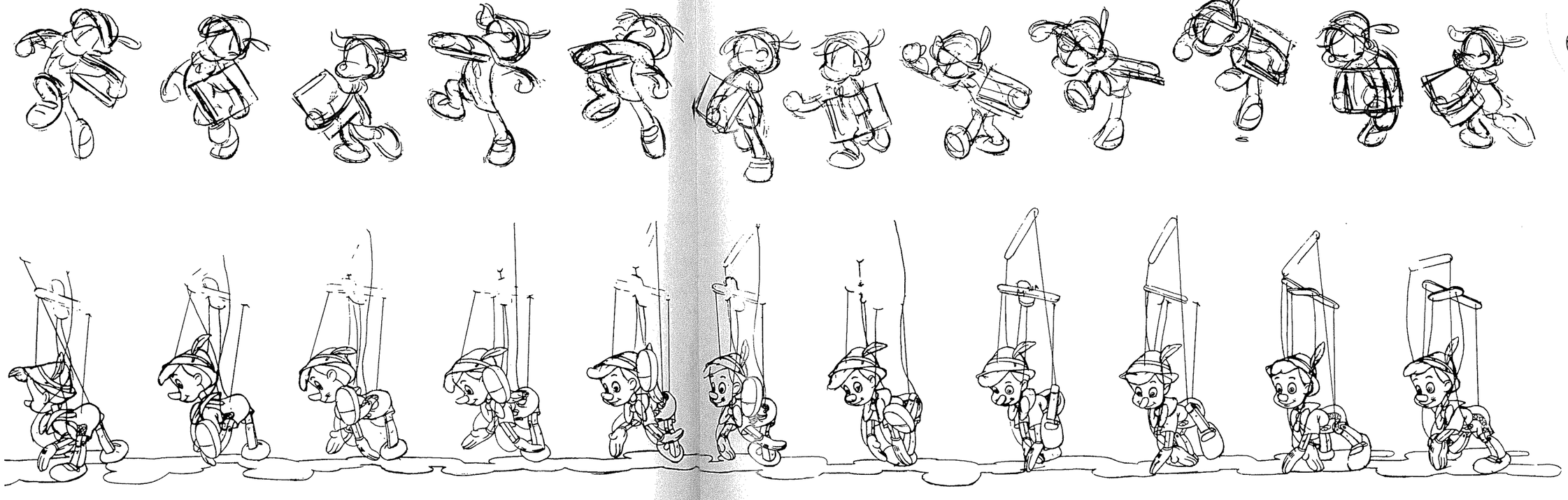
Then Walt Disney decided to make *Bambi*. This was to be a picture of beauty and mood, of philosophy and poetry, contrasting the intimacy of a dewdrop on a blade of grass with the excitement of young bucks leaping about on a meadow. *Bambi* had less story, by far, than the other features, being more like the pictorial Silly Symphonies, but it had strong character relationships, neither cartoon relationships nor caricatured, but real, believable relationships. Was this asking too much of personality animation?

Walt was not sure we were capable of animating this film quite yet, so while the rest of the staff moved on to *Fantasia*, two animators[2] were assigned to puzzle over the movements and drawing problems of deer and rabbits, and to search for a way of incorporating our tenets of communication into these foreign shapes. We knew we could make them real—that is, look like real deer—but we also knew that without establishing personality we could never make that type of deer carry a whole feature.

We studied film of deer, looked at pictures, talked to the sketch men who had been drawing deer for most of a year (while the story had been shaped and developed), and watched deer at the zoo. The two fawns kept at the studio had long since grown up and departed, so we got no help from them, but we did have film taken while they were young and frisky. However, nowhere could we see the leg squash as it took the weight of the body, and no cheeks fattened as the mouth closed. No eyes changed shape, no jaws dropped in a big yawn, no bodies bulged or stretched; they were annoyingly lithe and supple and strong and muscular. What were we going to draw, animate, move?

While studying live action film of rabbits, we noticed one white bunny hopping away in a very spirited manner. The action was faster than we would have thought, but it read well and had unusual life. A frame by frame check revealed that all detail on the rabbit's body disappeared with the first frame of action—all the camera recorded was a white shape that changed radically on each frame of the film. Each hop took only five frames, and while the direction often changed erratically, the positions in the action remained the same.





R-FOOTED FRIENDS

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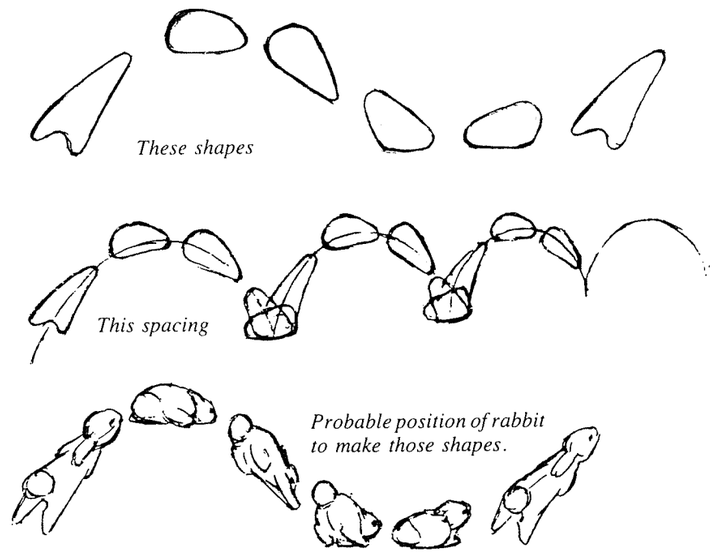
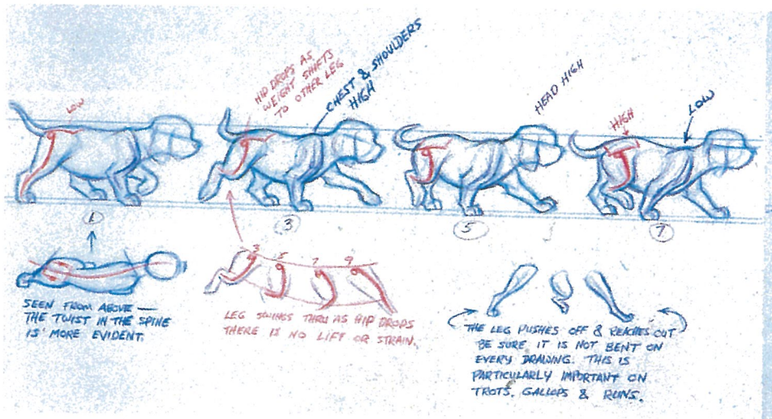
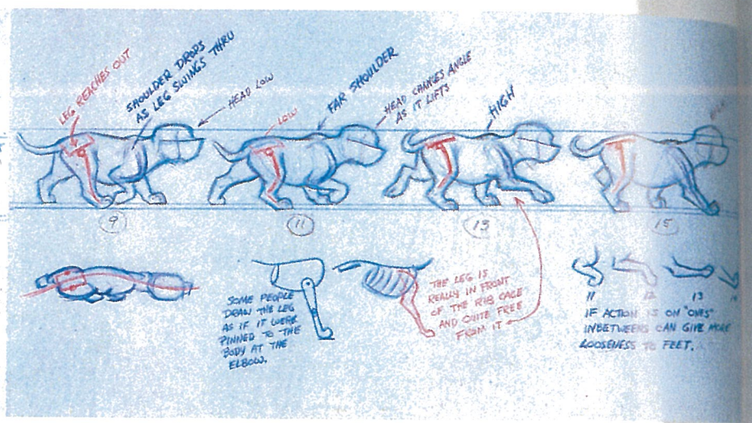


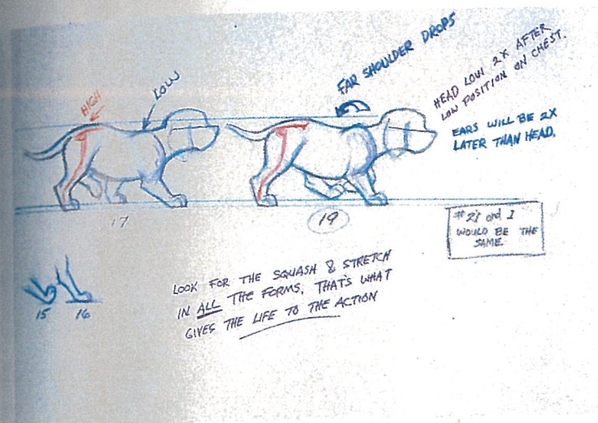
It was in the tracing of the film that we found our answer. We did not have photostats on this footage, and the images were small and difficult to see, but once we discovered the secret of the animal's construction all the pieces fell into place. There was actually more squash and stretch than we could use, but it was not occurring where we had been looking. Instead of being out in the open, away from the body, the activity was at both ends of the legs, in the shoulders and haunches, and, again, in the fingers and toes. Here the action was as broad as any cartoon drawing, with great flexibility and spring in the tips, and massive swelling and thrusting up in the body.

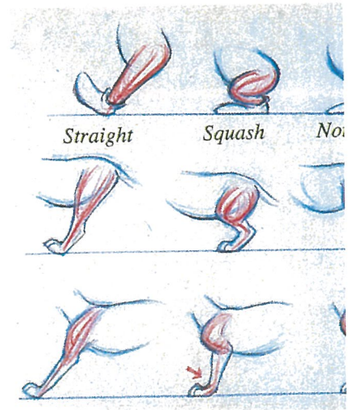
It took some time to understand the deer's anatomy, to realize that the shoulders are nearly in front of the rib cage and that the rear end is practically all leg and haunch, but once this was understood our drawings of the animals began to have the fluid, loose feeling, combined with muscular power, that was so typical of deer. One day we were studying a strip of film showing an adult deer bounding across a small ravine. As the front legs took up the weight guided it into a turn, the elbow ac *above* the line of the back. After anything was possible.

Our other big surprise came in the ment in the deer's spine and pelvis. and turns and flexibility were more t





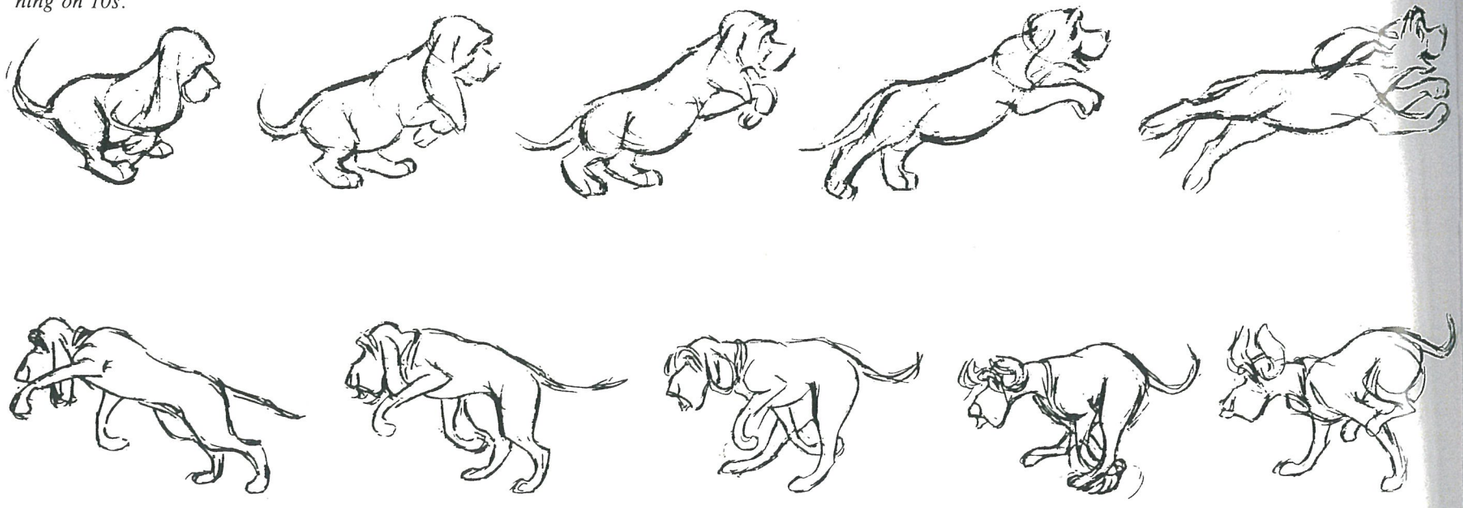


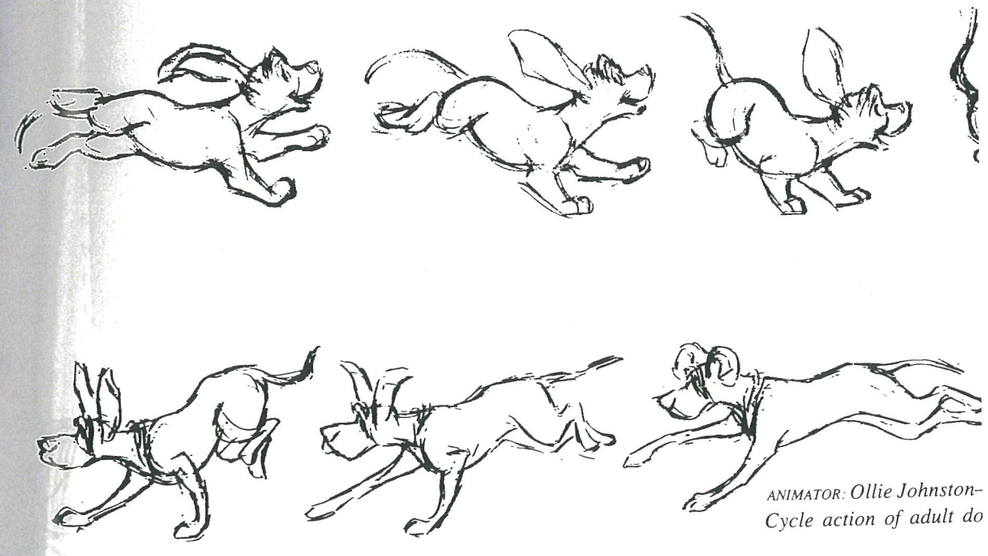


Basic animal walk on 10s, shown on a puppy because it is easier to see what is happening in his loose and floppy action. The principles are the same whatever the animal.
Animals seldom walk very far in the same gait. They speed up, slow down, vary the leg pattern, mainly concentrating on where they are going. Why they are going will also affect gait and stance. Their line of sight is usually the key to their action.
Once you understand the relationships, the drawing, and the character of the animal, you can then add the personality traits to the walk: swagger, prance, caution, worry, confidence. The head may be held higher, the feet may drag—changes in attitude and timing will change the char-

ANIMATOR: *Frank Thomas*—
The Fox and the Hound.

Cycle action of a puppy running on 10s.





ANIMATOR: *Ollie Johnston*—
Cycle action of adult do