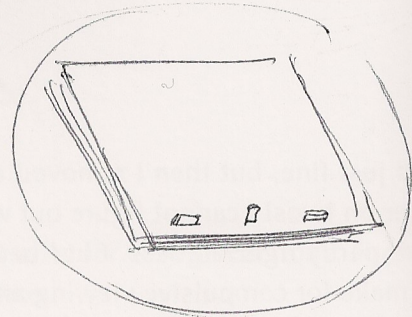
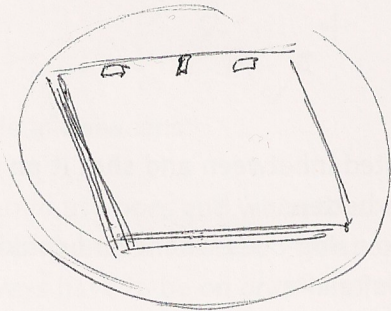


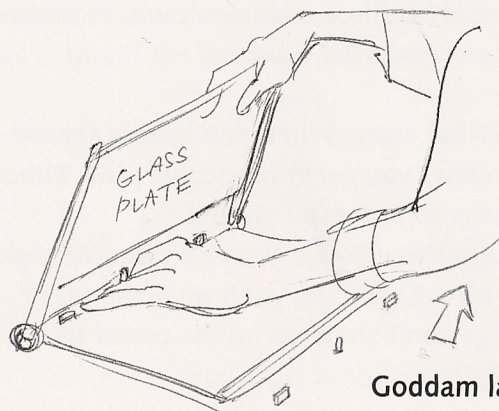
The TOP and BOTTOM PEGS BATTLE

An endless debate has gone on among classical animators about whether to register the drawings on top pegs or bottom pegs. At present, bottom pegs seem to have won out; most people seem to be animating using the bottom pegs to hold their drawings.



Frank Thomas has said, 'Getting off the top pegs and working on bottom pegs has actually *advanced* the art of animation because you can *roll* the drawings as you work and see what's happening – whether the creature is doing what you want.' And that's had a tremendous influence. (Disney animators all work on bottom pegs.)

Alternatively, Ken Harris spent his life on top pegs and would *flip* his drawings and see what's happening – whether the creature is doing what he wants. (Warner animators all worked top pegs).

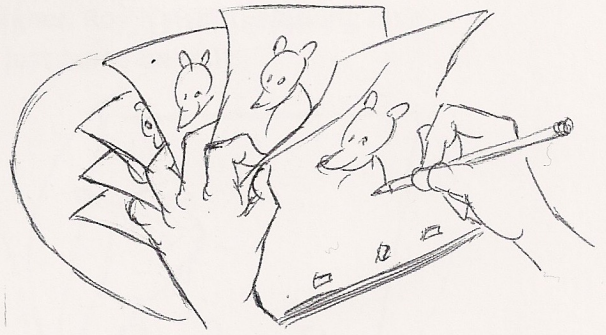


Goddam lazy cameraman

Ken would sometimes go red in the face and explode, 'You know who started that whole bottom pegs business? A goddam lazy cameraman who didn't want to be bothered reaching all the way under the glass pressure plate to place the cels at the top! He's the bum who started bottom pegs!'

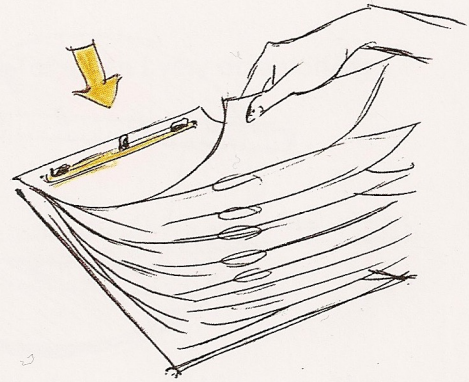
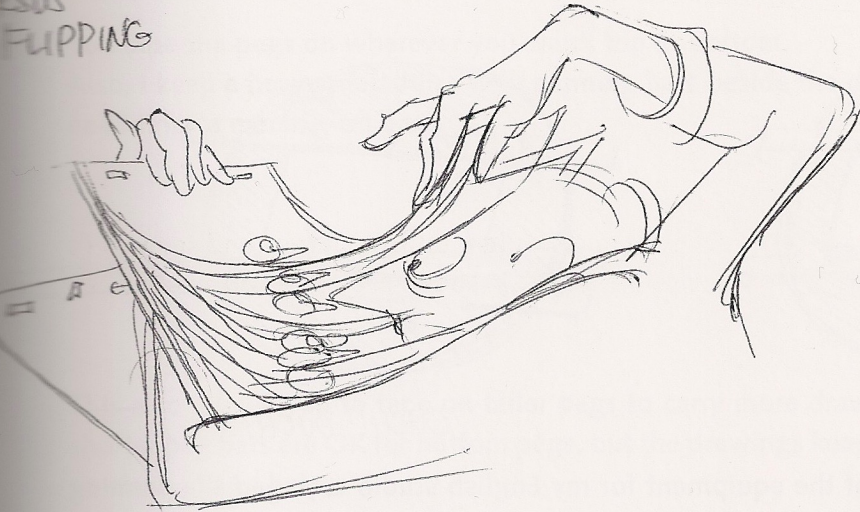
It comes down to something like this:

ROLLING...



If you only have four fingers you can still roll four sheets at once, plus the bottom drawing – giving us five images.

JUST FLIPPING



Ken would stretch an elastic band around his pegs to make flipping easier as he drew – without having to take the drawings off the pegs.

When Ken had calmed down, he used this example:

SAY I WAS OFFERING YOU A CIGAR FROM A CIGAR BOX –
WOULD YOU LIKE ME TO PRESENT IT TO YOU

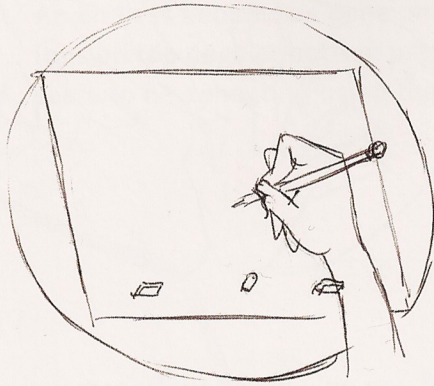
LIKE THIS?

OR LIKE THIS?

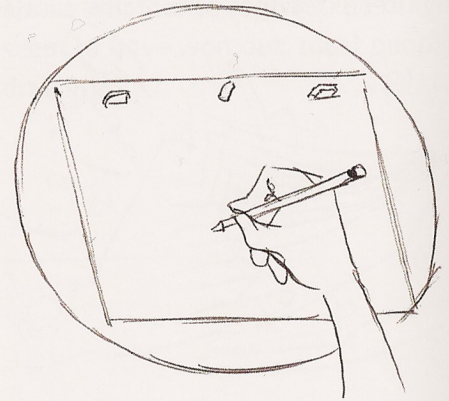


And what's going to make it easiest to draw?

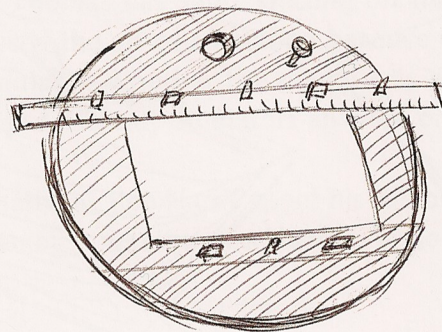
LIKE THIS?



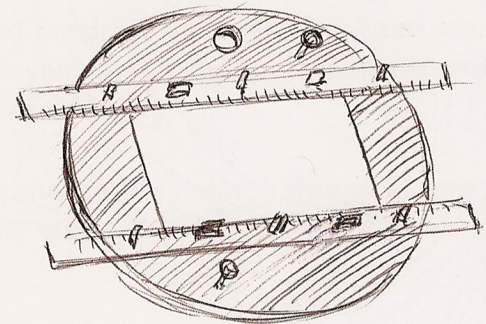
OR LIKE THIS?



Add to this the fact that most of the discs that animators use are made of heavy metal with inset panning bars with screws to tighten and release them for sliding pans. It's pretty awkward with all these points sticking up and we unconsciously have to dodge the pegs as we draw.

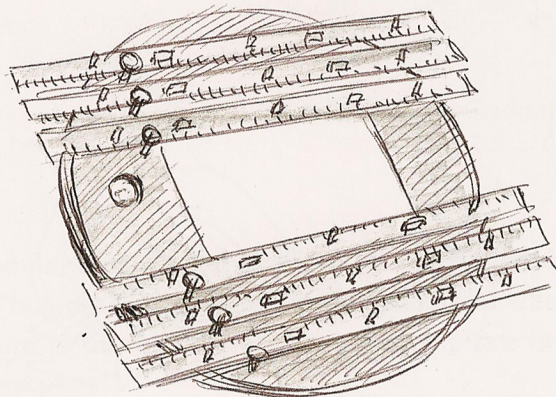


OUCH.



OUCH! OUCH!

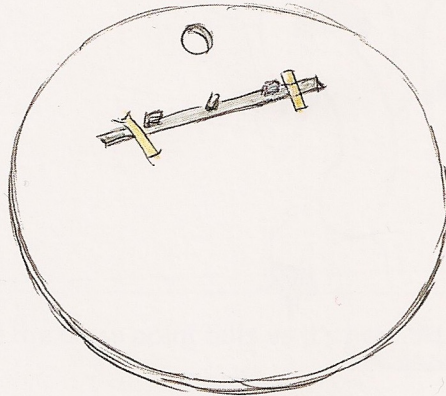
The engineer who made most of the equipment for my English studio arranged the panning bars differently every time. I had to fire a guy once, and his close friend – who was very talented – quit with him. To get even with me they ordered a special disc (on the firm) made with three panning bars for different field sizes, top and bottom – six in all! By the time you added in the screws it looked like this:



HOW WOULD YOU LIKE TO DRAW ON THIS? YOU COULD END UP IN INTENSIVE CARE.

But how often do you really use the panning bars? Not too often, in my experience.

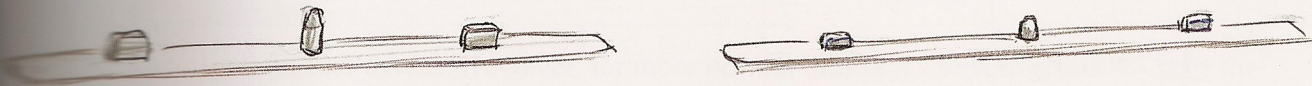
One day about fifteen years ago I found layout artist and designer, Roy Naisbitt, working on a big piece of white plastic Perspex (Plexiglass) with a peg bar just taped on to it.



What a solution!

You tape the pegs on wherever you want, top or bottom.

Also, I keep a heavy metal disc with panning bars beside the desk for when I very occasionally need it for a mechanical pan.



This also allows you to tape on taller pegs to carry more drawings if you're on top pegs. The shorter peg bars are OK for bottom pegs, but the drawings keep falling all over the floor. Again, an elastic band helps.

I'm delighted to see that Roy's solution has spread through the industry, as I've seen several animators walking around in Hollywood with Perspex discs and a taped-on peg bar tucked under their arms.

It works just fine. I animated the first close-up on *Who Framed Roger Rabbit* in a Welsh hotel room with a Perspex disc on my knee – and top pegs!

I work both ways. Again, it's not only but also. Top pegs is great for drawing and bottom pegs is great for rolling. Take your pick.

Obviously, computer animators are free from all this tactile nonsense – but I'm sure you have equivalent stuff to cope with. Having started out as a drawing animator, Jim Richardson, now a computer animator, told me that when he first switched over to the computer, he found it was like 'animating with a microwave'.