

CONSTRUCTION OF THE HEAD

THINK OF THE HEAD AS A ROUNDED MASS, EITHER BALL SHAPED, PEAR SHAPED ON EGG SHAPED AS THE CASE MAY BE - IN ANIMATION THIS HEAD SHAPE MAY CHANGE PEPSPECTIVE AND FORM. A GREAT NUMBER OF TIMES DURING A SCENE. - TO SIMPLIFY MATTERS A CONNECT PERSPECTIVE FRAMEWORK SHOULD FIRST BE DRAWN, THEN THE DETAILS CONSTRUCTED GIVEN THIS FORM



THE CHAPACTER STARTS WITH A ROUND DLOBE



THAT WILL PRIVING PACE IN THE MUDDLE LENGTHWISE - THIS DETERMINES THE TILT OF HEAD



LINE CIRCLE-THE SETS



OF NOSE THE INTO SHE LIN











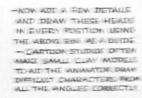




TAKE AN EGG-DRAW THE GUIDE CIRCLES AROUND IT-THEN PUT IN THE FACE-NOW TURN THIS EGG IN EVERY CONCIEVABLE POSITION AND DRAW IT-ANIMATION PRESENTS THE SAME PROBLEMS











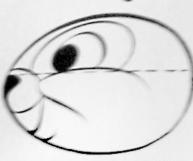






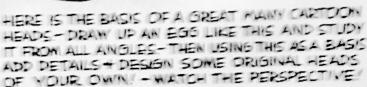










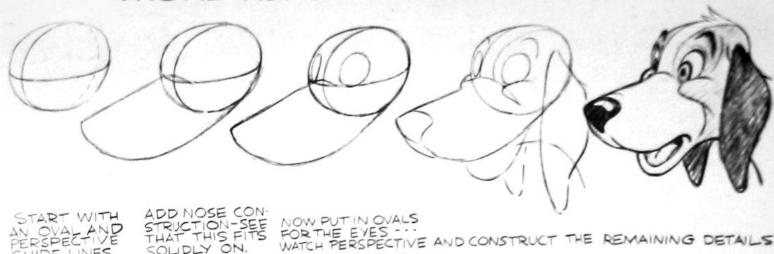




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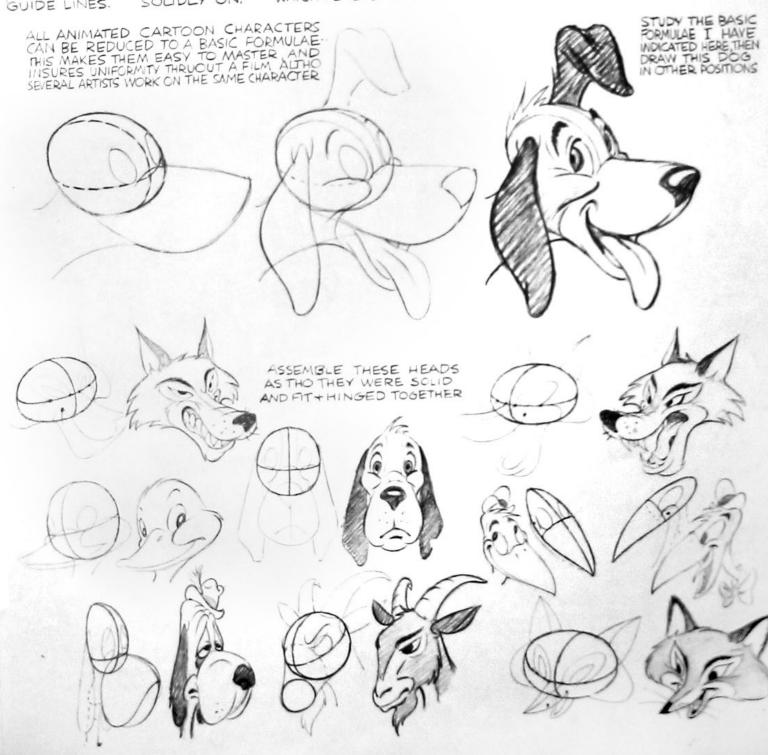
Preston Blair, Cortoon Director, is one of the fine artists of Animation. Associated with the Disney Organization, he animated a "Principlic," "Barrio," and "Fantasia," in the later he designed the hippos. Later for Metro-Golden-Midve in designed and animaled the highly successful, "Red that Riding thood," and directed corrison share. Brain is active in magazine destrates and fine onto, and a a member of the California and American Watercolor Societies. Recently when he was first price a as National From Exhibition of the Lagent Beach Air Gallery, I met him and suggested he make the book for you interesting and heipful to all finase studying this popular cartoon medium.

MORE HEADS CONSTRUCTED

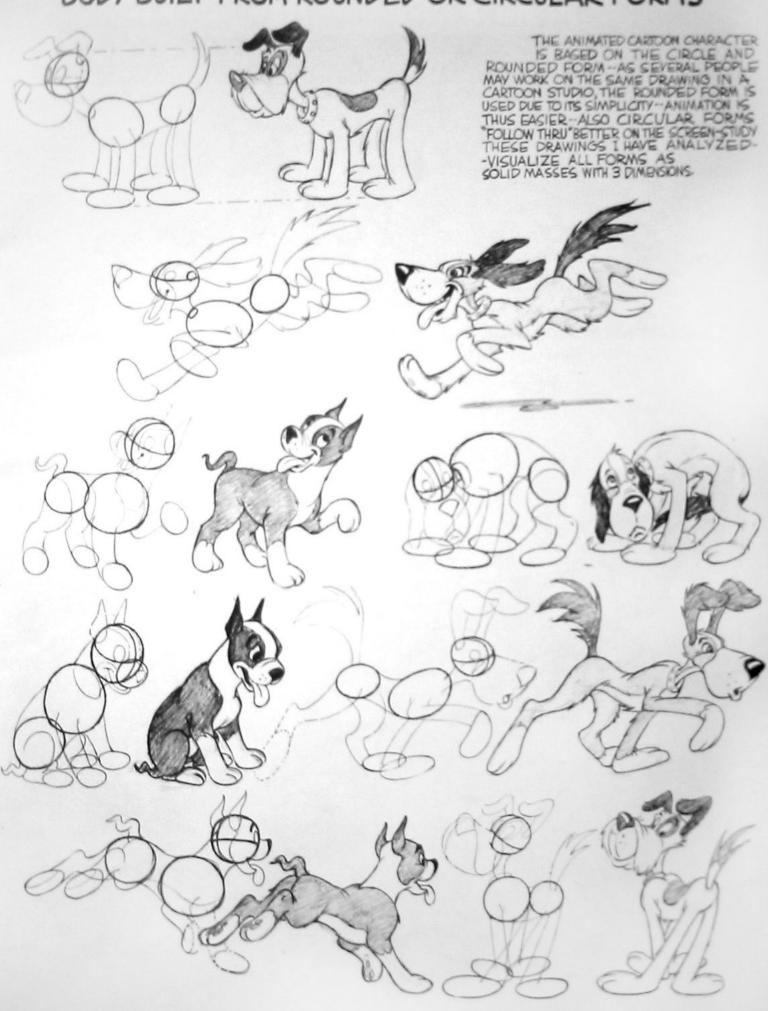


START WITH AN OVAL AND PERSPECTIVE GUIDE LINES.

ADD NOSE CON-STRUCTION-SEE THAT THIS FITS SOLIDLY ON.

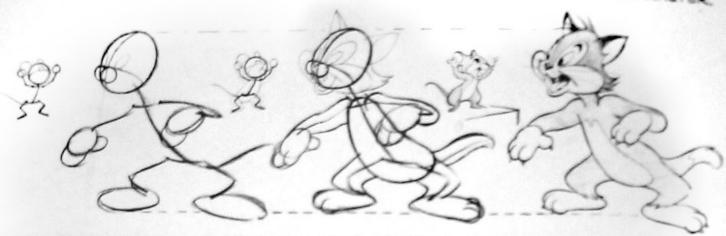


BODY BUILT FROM ROUNDED OR CIRCULAR FORMS

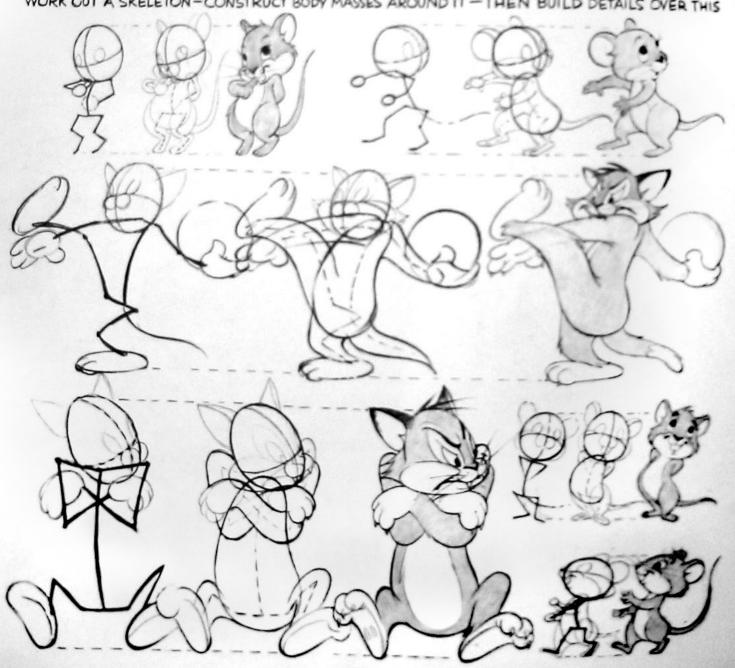


THE SKELETON FOUNDATION

BUILD THE CARTOON UP FROM A ROUGH SKELETON -- DON'T EXPECT TO GET THE NIGHT SKELETON THE FIRST TRY ALWAYS -- NO ONE CAN DO THAT -- EXPERIMENT-DISCARD-MAKE SEVERAL THEN PICK THE BEST ONE -- BE SURE TO WORK LOOSE IN CONSTRUCTING THE CHARACTER



WORK OUT A SKELETON-CONSTRUCT BODY MASSES AROUND IT -THEN BUILD DETAILS OVER THIS

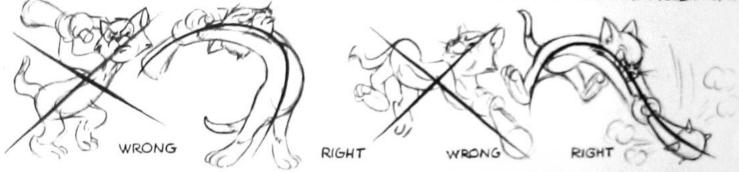


LINE OF ACTION

AN IMAGINARY LINE EXTENDING THRU THE MAIN ACTION OF THE FIGURE IS THE LINE OF ACTION" -- PLAN YOUR FIGURE AND IT'S DETAILS TO ACCENTUATE THIS LINE -- BY SO DOING YOU STRENGHTEN THE DRAMATIC EFFECT -- THE FIRST THING TO DRAW WHEN CONSTRUCTING A FIGURE IS THE LINE OF ACTION -- THEN BUILD OVER THAT.

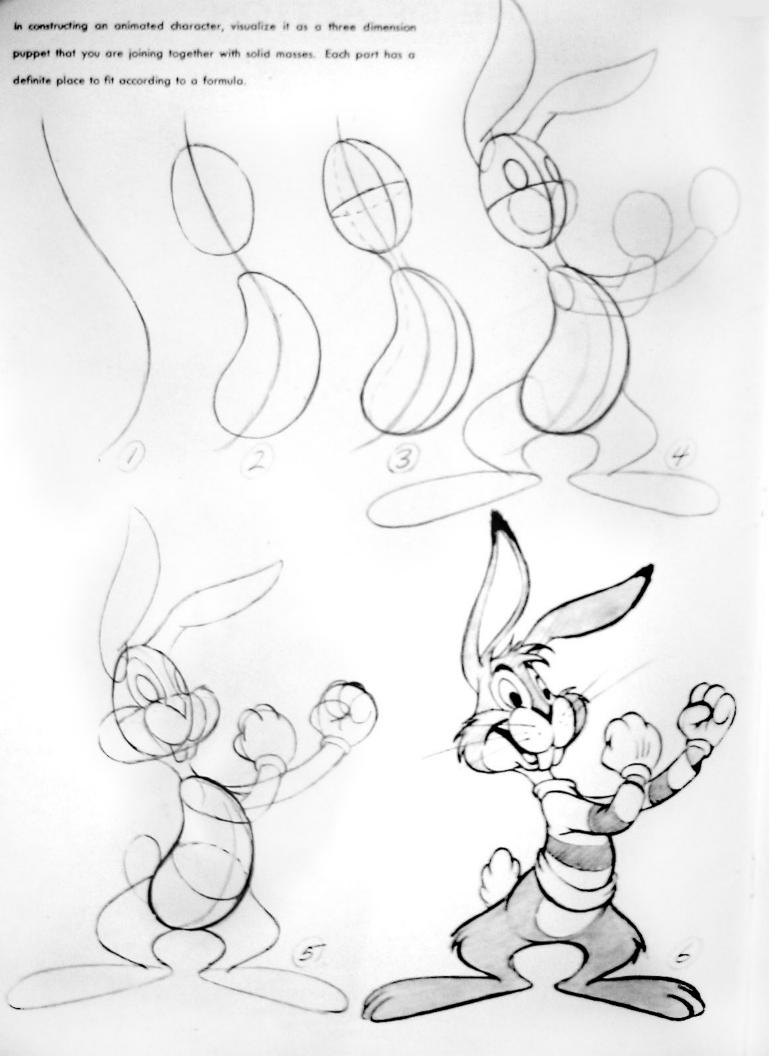


WRONG! LINES OF ACTION UNFIT --- RIGHT! LINES OF ACTION FIT AND ARE ACCENTUATED

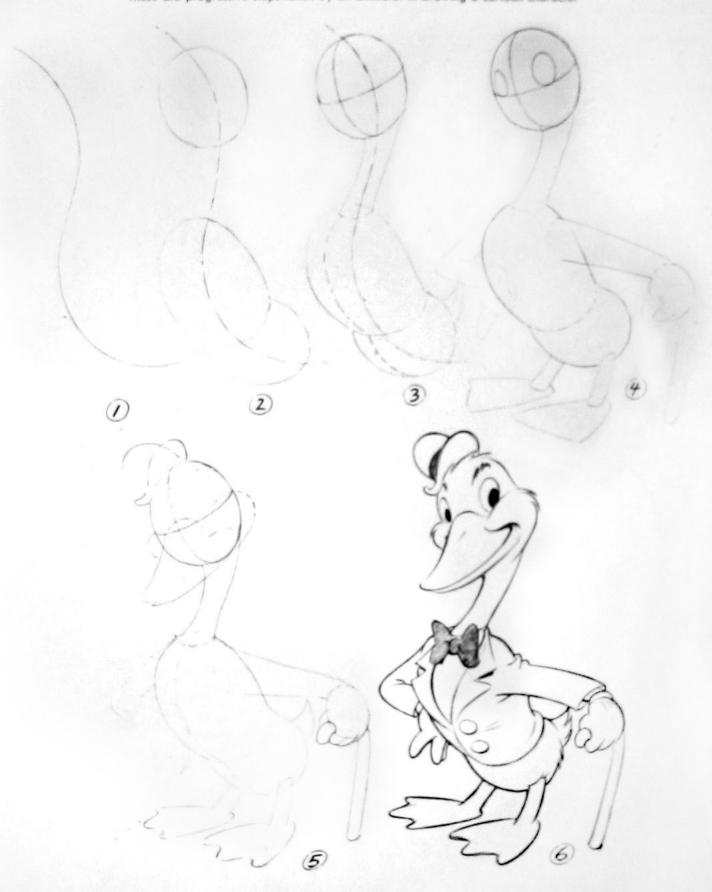


STUDY THESE DRAWINGS IN WHICH I'VE INDICATED THE LINE OF ACTION





These are progressive steps taken by an animator in drawing a cartoon character



- 1 Draw in "Line of Action" to establish general stance of figure.
- 2 Rounded masses for head and body are put in.
- 3 Perspective lines around these masses are put in to establish front, side, tilt etc. of body and head.
- 4 Now arms, legs and eyes are constructed or "anchored on" in their definite position to perspective lines.
- 5 Details are now fitted in or hinged into their position.
- 6 Character is cleaned up around these construction lines.









CUTENESS IS BASED ON THE BASIC PROPORTIONS OF A BABY + EXPRESSIONS OF SHYNESS OR COYNESS.

> EARS ARE SMALL IN / RELATION TO ADULT SIZE.

NO NECK-HEAD JOINS ON TO BODY DIRECTLY.

BODY PEAR SHAPED AND ELONGATED.

SWAY BACK-WITH THIS LINE CONTINUING UP BACK OF HEAD AND DOWN INTO FANNY.

FANNY PORTRUDES - NEVER BULGES - BUT FITS INTO LEG

HEAD LARGE IN RELATION

HIGH FOREHEAD IS VERY IMPORTANT.

EYES SPACED LOW ON HEAD & USUALLY LARGE AND WIDE APART.

-NOSE + MOUTH ARE ALWAYS SMALL.

ARMS ARE SHORT AND NEVER SKINNY AND TAPER DOWN TO THE HAND AND TINY FINGERS

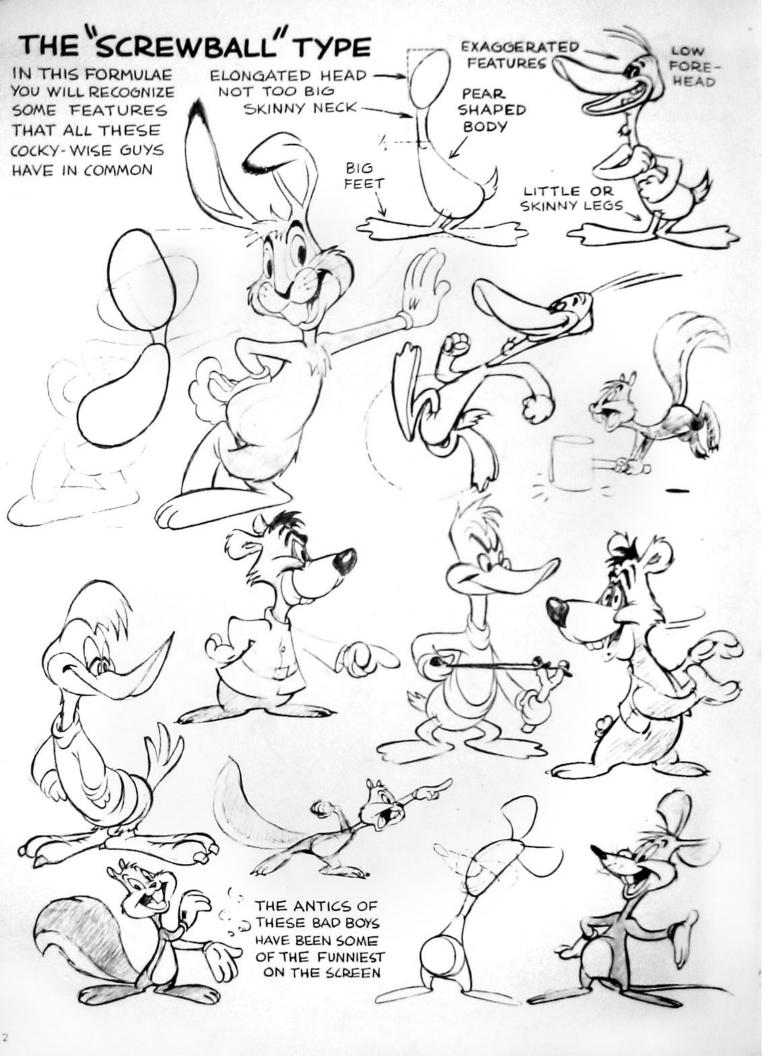
TUMMY BULGES -LOOKS WELL-FED.

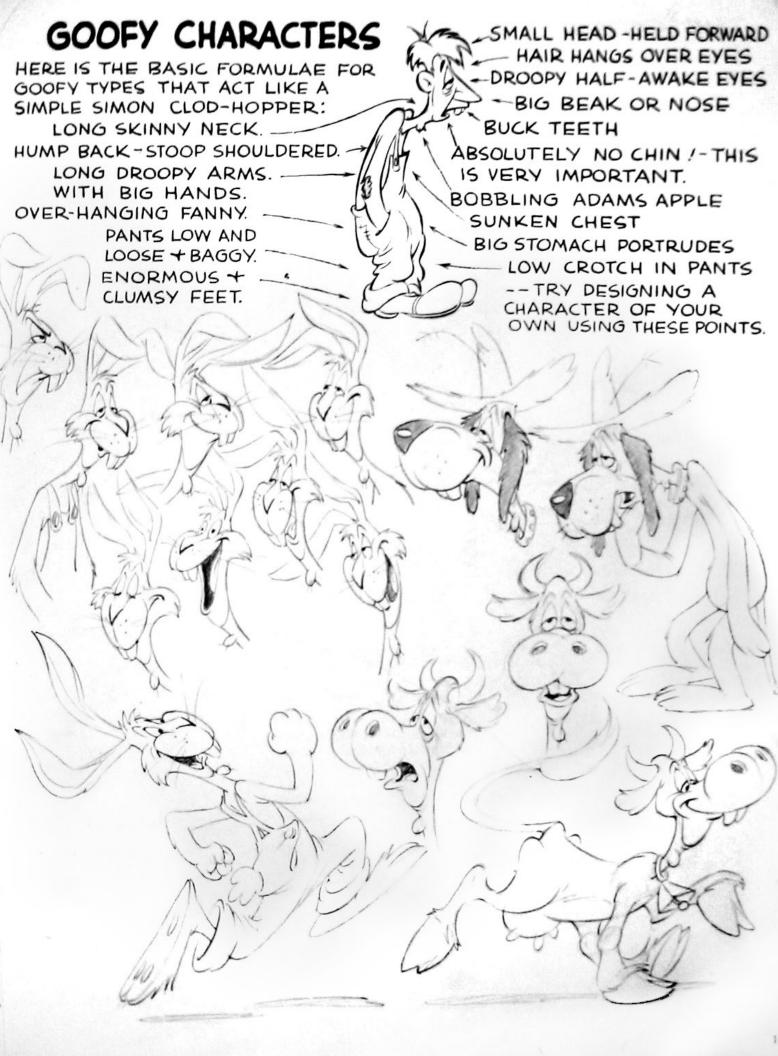
FAT LEGS - SHORT AND TAPERING DOWN INTO SMALL FEET FOR TYPE.



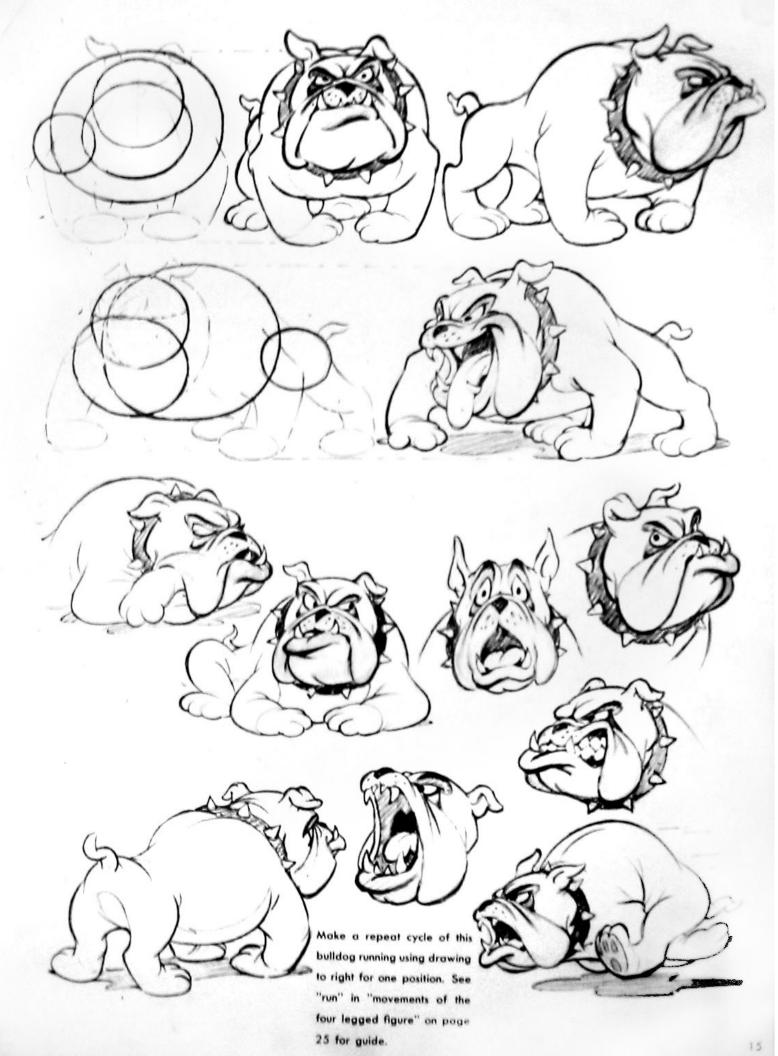
NOTICE HOW ABOVE POINTS ARE USED IN THESE ANIMALS





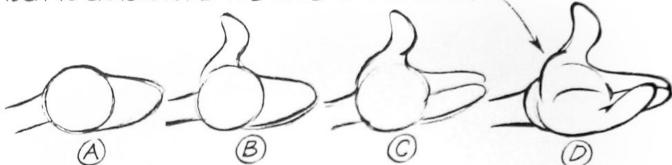


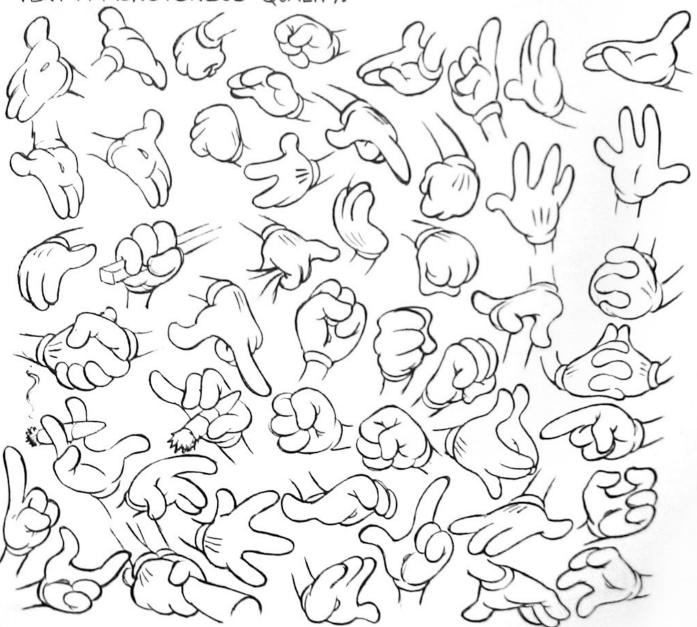




HANDS

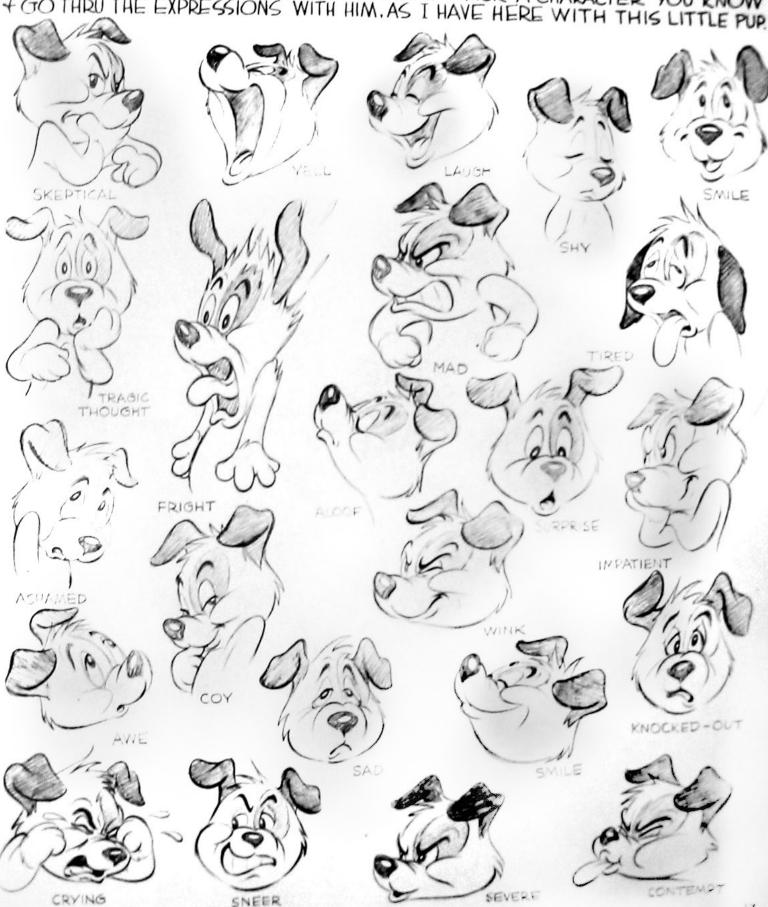
TO DRAW THE HAND FIRST START AS IF IT WERE A MITTEN A AND (B) — THEN PUT THE TWO MIDDLE FINGERS IN FOLLOWING THIS SHAPE (C) — THE LITTLE FINGER IS THEN PUT IN, VARYING IT IN ANY FASHION TO PREVENT MONOTONY (D) — IT IS OFTEN A GOOD IDEA TO EXAGGERATE THE BASE OF THE THUMB.





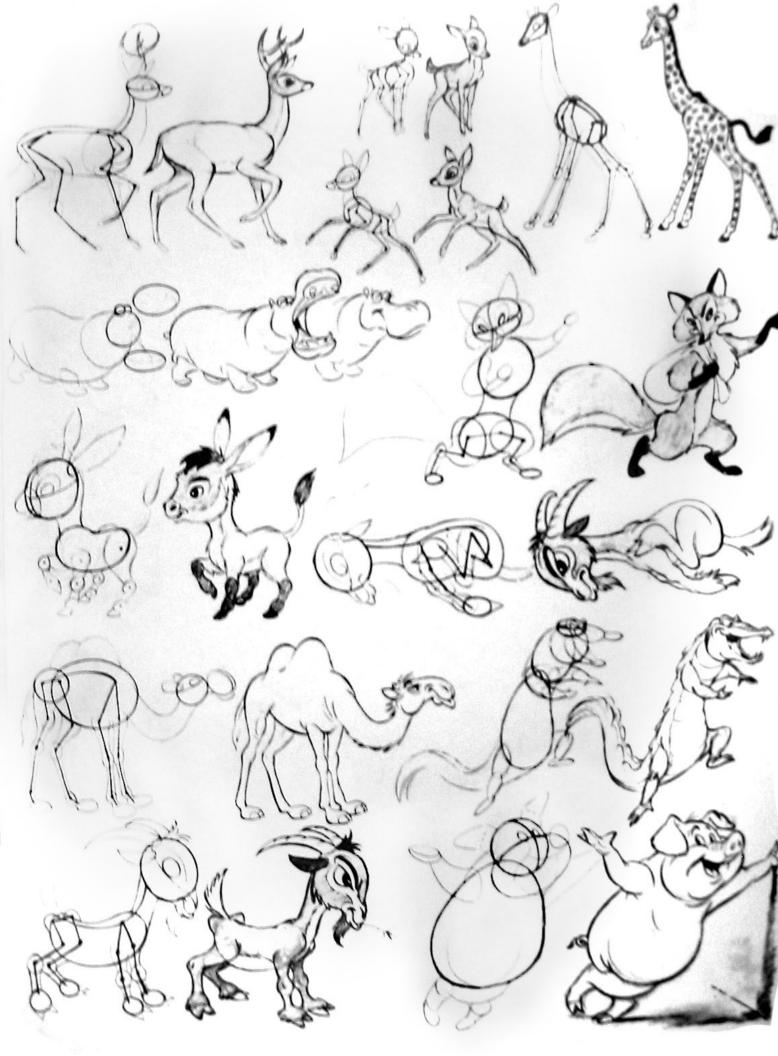
FACIAL EXPRESSIONS

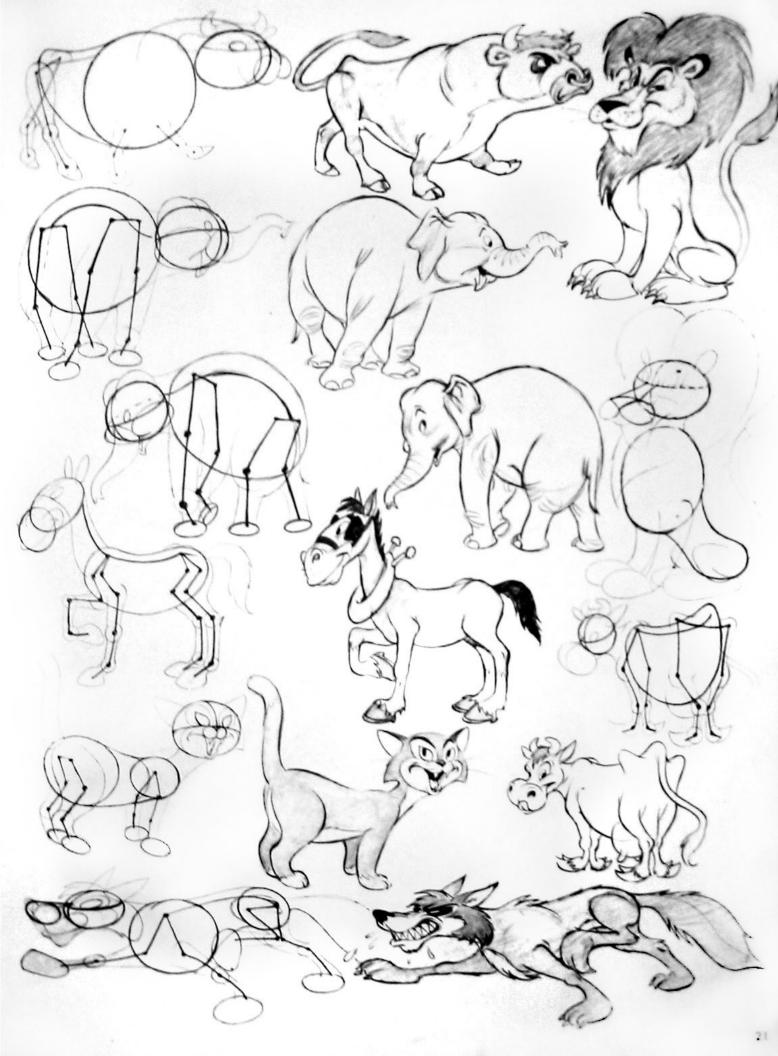
AN ANIMATOR'S JOB IS THE SAME AS AN ACTOR'S JOB IN LIVE ACTION PICTURES. - BOTH SHOULD BE MASTERS OF PORTRAYING EMOTIONS. - STUDYING YOUR OWN GRIMACES IN A MIRROR IS A MUST. - PICK A CHARACTER YOU KNOW + GO THRU THE EXPRESSIONS WITH HIM. AS I HAVE HERE WITH THIS LITTLE PUR



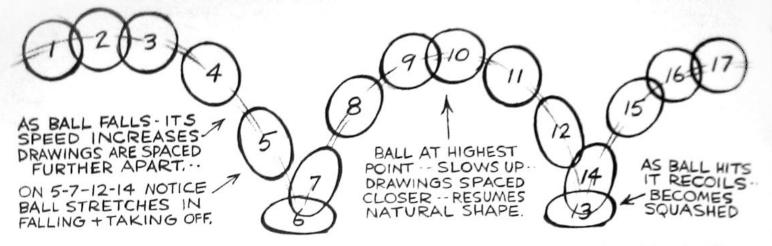




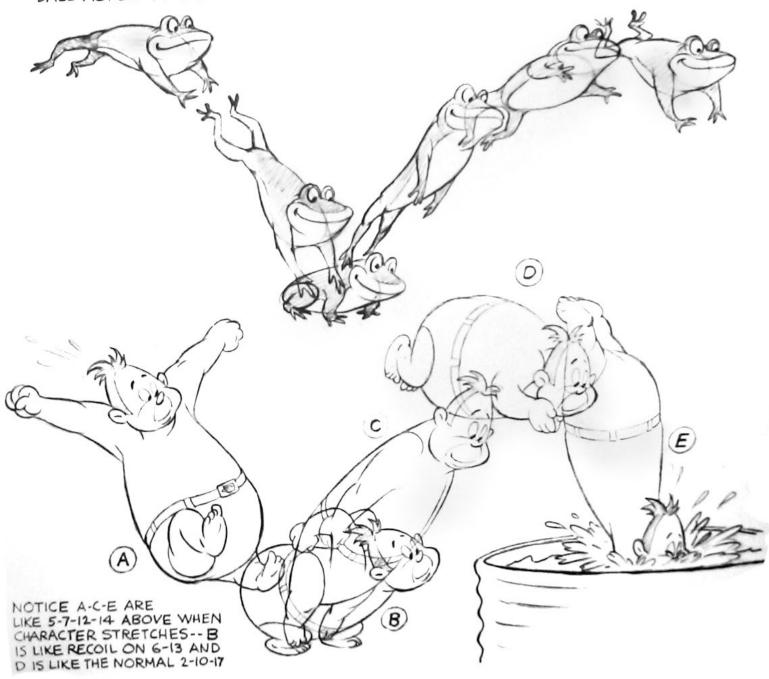


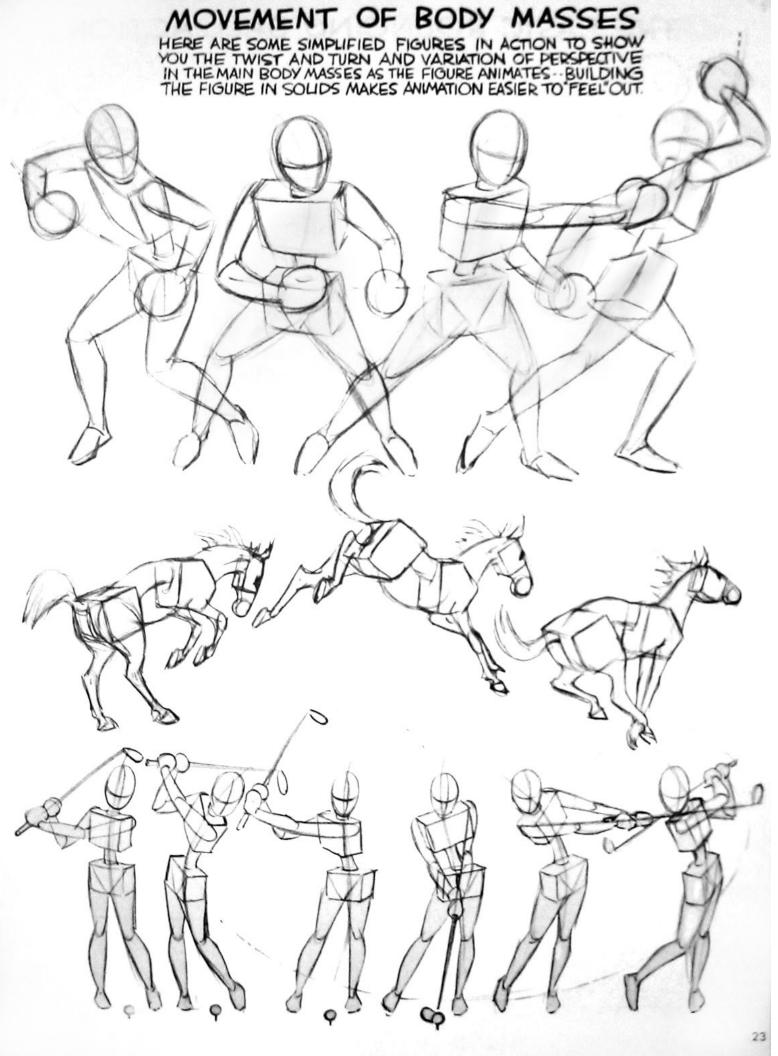


THE BASIC BOUNCING BALL ACTION



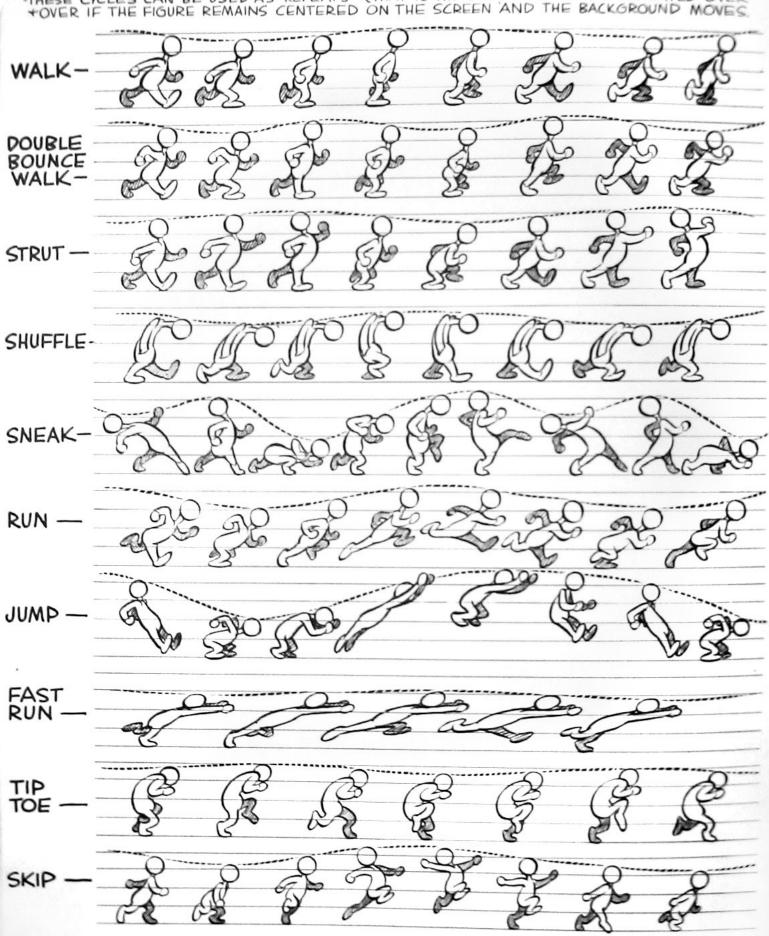
NOTICE BALL FOLLOWS A DEFINITE PATH OF ACTION -- STUDY CLOSELY THE SPACING OF BALL ALONG THIS PATH -- NOTICE THE BASIC SIMILARITY OF THIS BALL ACTION TO THE HOP AND JUMP BELOW: ALSO TO THE WALK-RUN-LEAP-SKIP-ETC.





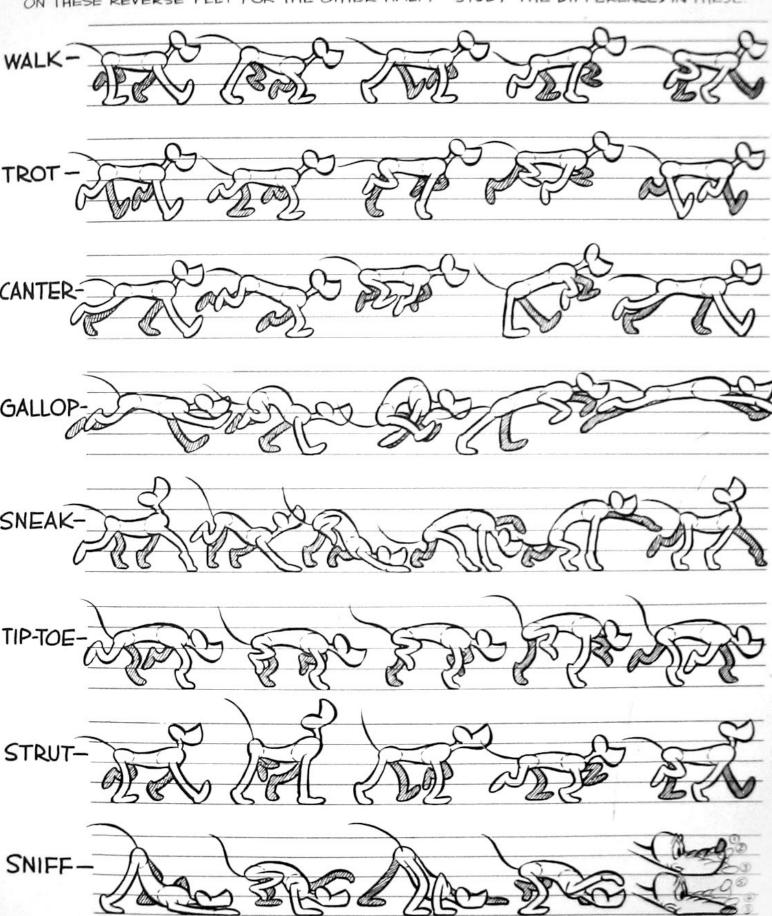
MOVEMENTS OF THE TWO LEGGED FIGURE

HERE IS A COMPARISON OF THE VARIOUS TWO LEGGED FORWARD MOVEMENT CYCLES - I HAVE DRAWN ONE HALF OF EACH CYCLE BELOW - REVERSE HANDS + FEET FOR THE OTHER HALF - THESE CYCLES CAN BE USED AS "REPEATS" - (THAT IS THE DRAWINGS MAY BE REPEATED OVER + OVER IF THE FIGURE REMAINS CENTERED ON THE SCREEN AND THE BACKGROUND MOVES.



MOVEMENTS OF THE FOUR LEGGED FIGURE

HERE IS A COMPARISON OF THE MAIN CYCLES OF FOUR LEGGED MOVEMENT.— SOME OF THESE CYCLES ARE COMPLETE -- OTHERS ARE ONE-HALF OF THE CYCLE -ON THESE REVERSE FEET FOR THE OTHER HALF. -- STUDY THE DIFFERENCES IN THESE.



WALK, TROT, SNEAK, STRUT, +TIPTOE ARE 1/2 CYCLES . - - GALLOP, CANTER+SNIFF ARE COMPLETE CYCLES

DIFFERENCE BETWEEN WALK + RUN



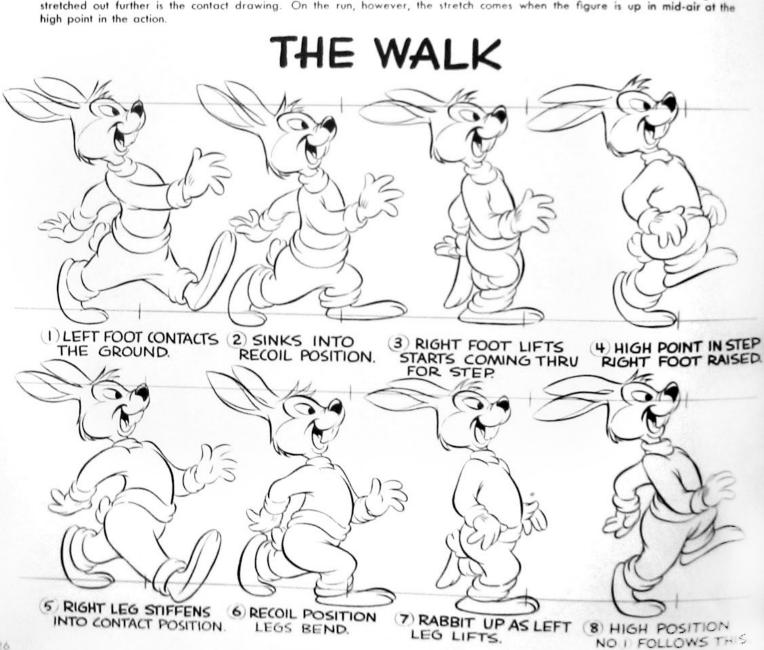
Above are the contact drawings from (A) The Walk (B) The Run (C) The Fast Run. The contact drawing is the drawing on which the foot, after being lifted, strikes the ground. In laying out a run or walk for animation, usually it is these contact drawings that are determined first. This sets the speed, size of character, etc. of the action. Then the rest of the action is built around them

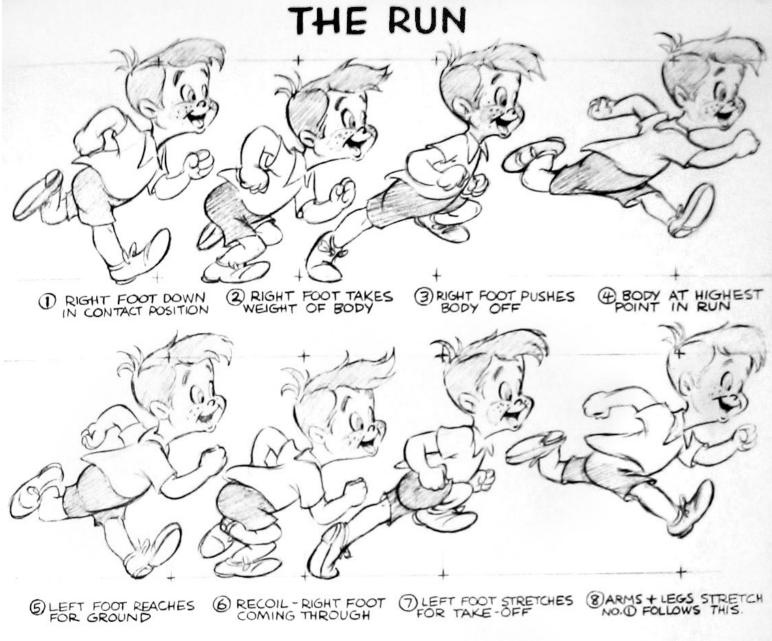
The position of the back foot on the contact drawing determines the speed more than any other single factor. Notice on (A) the back foot is down still contacting the ground. On (B) the back foot has left the ground. On (C) the position of the back foot is still higher.

The front foot is stretched out further on the walk contact position, the body is more upright, denoting less speed. On the run drawing the body leans forward, and the front foot is back further. On the fast run drawing the body leans away forward denoting speed, and the front foot is back now under the body.

The arms swing conversely with the legs. The left arm swings with the right leg and vice versa. Also the arms swing more violently in the run. In the fast run the swing on the arms would be too violent. It has been found they are more effective when held straight out in a reach position.

Compare the action of the walk with the run, and you will note that in the walk, the drawing in which the arms and legs are stretched out further is the contact drawing. On the run, however, the stretch comes when the figure is up in mid-air at the high point in the action.



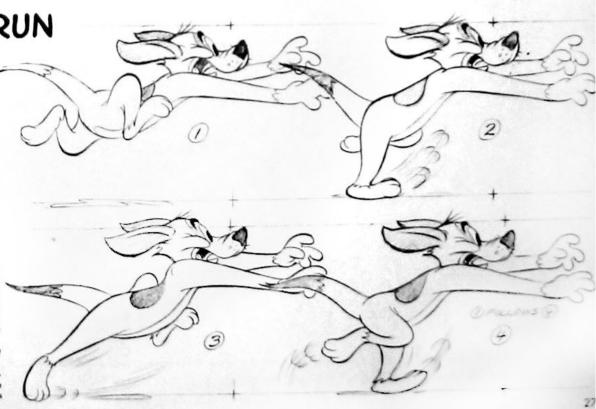


THE FAST RUN

In animating a fast run here is a rule about animation to remember: To have an action drawing in practically the same silhouette position as another within one or two frames (exposures) is not a good practice. The action will be apt to look monotonous and might often give a false illusion and a different effect than the one you are striving to create. As for example, those moving wheels in old fashioned movies, that appear to be going backwards instead of forwards. In the walk and run there are enough drawings between similar silhouette positions (1 and 5 above) so that there is no problem here. But that is not the case with this four drawing cycle of a fast run. Notice that all foot action drawing is varied and not similar to any other. 3 is varied to be different from 1, and the same with 2 and 4. There is a single circular action on the head and body instead of a double circular action as in the walk and run.

The speed lines around the feet help in a fast action like this.

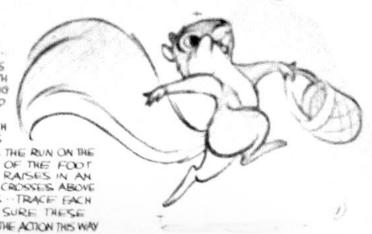
The crosses above and below drawings represent a fixed point on the screen. If you trace these repeats be sure that they coincide.

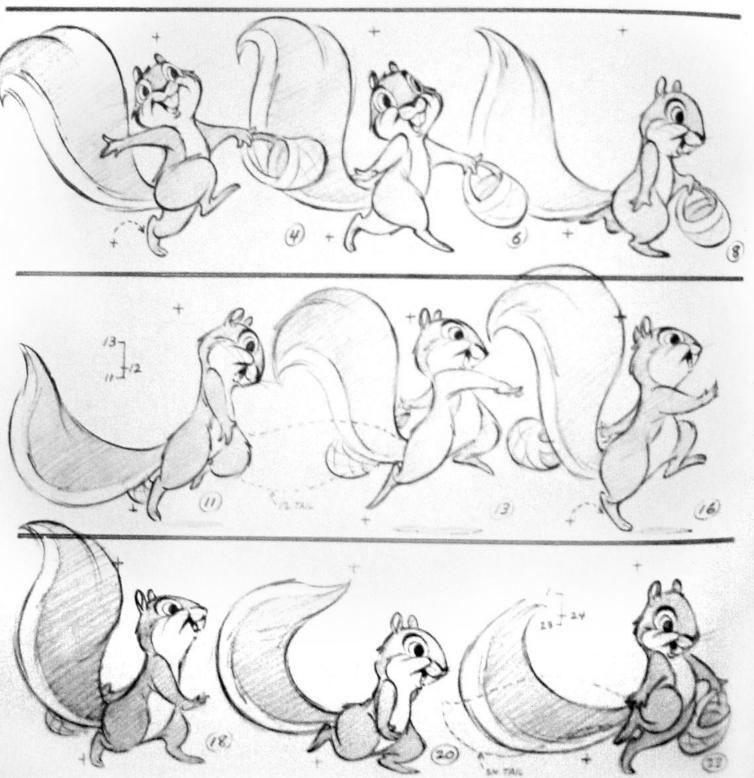


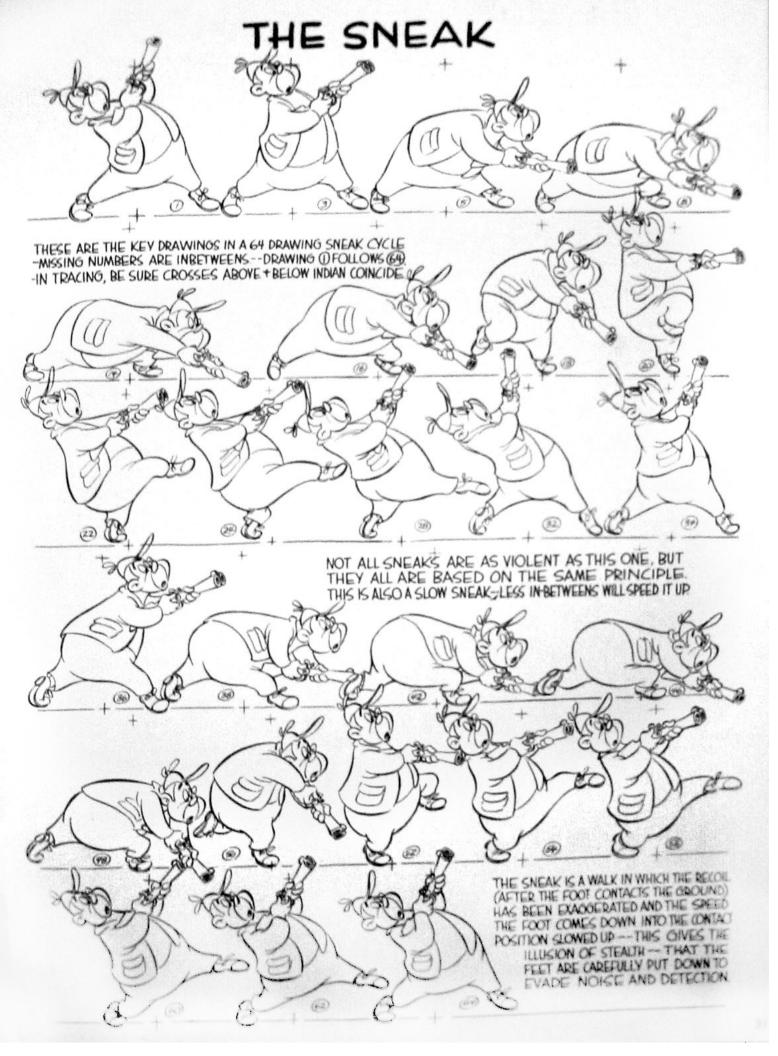
THE SKIP

THE ARE THE EXTREMES OF A 24 DRAWING SOP CYCLETHE MISSING DRAWINGS ARE "INBETWEENS" (DRAWINGS SPACED EVENLY BETWEEN THESE DRAWINGS). THIS IS WITH THE EXCEPTION OF 12+24 - NOTICE THE CHARTS EXPLANING THE UNEVEN SPACING ON THESE DRAWINGS - 12 INSTEAD OF BRING EVENLY INBETWEEN 11+18 IS 18 OF THE WAY AND CLOSER TO 11 - THE SAME HAPPENS WITH 24 WHICH IS 1/8 OF THE WAY BETWEEN 23+1 - DRAWING 24 THUS

COMPLETES THE CYCLE. THE SKIP IS THE SAME AS THE RUN ON THE BODY AND HANDS - THE DIFFERENCE IS IN THE ACTION OF THE FOOT WHICH PUSHES THE BODY OFF THE GROUND AND THEN RAISES IN AN ARC. AND CONTACTS THE GROUND HISELF FIRST. THE CROSSES ABOVE AND BELOW EACH DRAWING ARE REGISTRATION MARKS - TRACE EACH DRAWING ON A SEPERATE SHEET OF PAPER (MAKING SURE THESE CROSSES OVERLAP) THEN FLIP THE DRAWINGS AND STUDY THE ACTION THIS WAY







LINE OF ACTION IN ANIMATION IN ANIMATION THE LINE OF ACTION IS THE BASIS FOR RHYTHM-SIMPLICITY + DIRECTNESS! START YOUR ANIMATION FIRST WITH A LINE OF ACTION-THEN A SKELETON+DETAILS

OVERLAPPING ACTION - FOLLOW THRU-SQUASH+STRETCH

overlanding the same time." By this I mean the main action can be preceded and followed by lesser actions that all relate or are the result of the there all of the same time. By this interest on the proper use of them will greatly improve the quality of your work. Notice from an anticipation action the cop comes up to an extreme accent on 10 as he starts saying "all right." This main action on the figure causes a lesser action or reaction on 8 mis cop control on the recoils up like rubber on 13 to 16, bounces back on 18 and then finally settles back up an 24. In other words a between 8 and 10 has caused an overlapping lesser action to occur from 10 all the way to 24. Study this cop closely and you will see other examples of everlapping action on all parts of the figure.

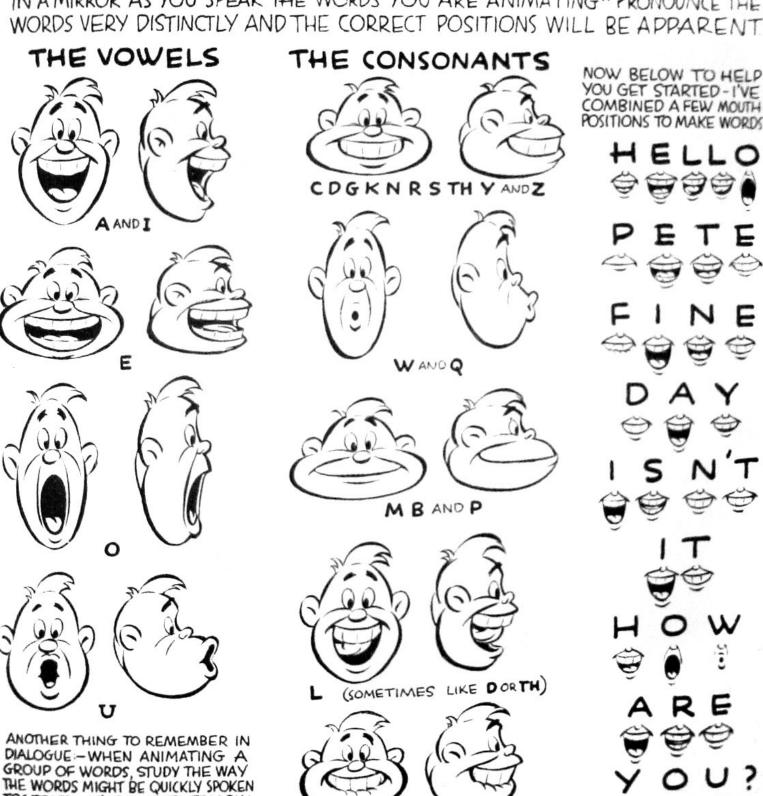
SQUASH AND STRETCH—When a sand bag moves thru the air, it will stretch the direction of movement and when its progress is arrested it will aquash out. If it were alive (anything can happen in a cartoon) it would also squash in anticipating an action in which it stretches. Notice 8 and 10 here. The proper use of squash and stretch will strengthen an action and it is essential in creating a feeling of weight in characters. You can bet I used it when I designed and animated the Hippos in Disney's "Fantasia!"

FOLLOW THRU—Another pointer on animation is: When a flag is waved or jerked around, the flag will follow a definite curving path determined by the position of the mast a split second before. This natural law is called the rule of "follow thru" in animation. Study the ends of the coat here for example Put a follow thru action on flexible loose waving things like dog's ears and tails, coots, etc. In a strict sense, any object that gives in animation has a certain amount of follow thru action.



DIALOGUE

HERE ARE THE MAIN MOUTH EXPRESSIONS USED IN DIALOGUE "FEEL THAT THE FACE IS AN ELASTIC MASS THAT CAN BE SQUASHED OR STRETCHED TO FIT THE MOUTH EXPRESSIONS. "THIS GIVES A GOOD CONTRAST BETWEEN POSITIONS AND THAT HELPS YOUR ANIMATION "STUDY YOURSELF IN A MIRROR AS YOU SPEAK THE WORDS YOU ARE ANIMATING." PRONOUNCE THE WORDS VERY DISTINCTLY AND THE CORRECT POSITIONS WILL BE APPARENT



F AND V

(SOMETIMES LIKE DORTH)

TOGETHER " IT'S BETTER TO FOLLOW THIS OVER-ALL MOUTH PATTERN, AND

HOLD DOWN OR MODIFY INDIVIDUAL

SYLLABLES NOT IMPORTANT TO THE WHOLE

HOW CARTOONS ARE MADE

The simplest form of animation is the "flip" book. Near the edge of a note book draw a dat, circle, or skeleton, and on the next page draw the same figure slightly progressed. Do this for 15 or 20 pages then flip the edges and an illusion of movement will be created. Good animators retain the same spirit of fun and simplicity of the "flip" book in their work.

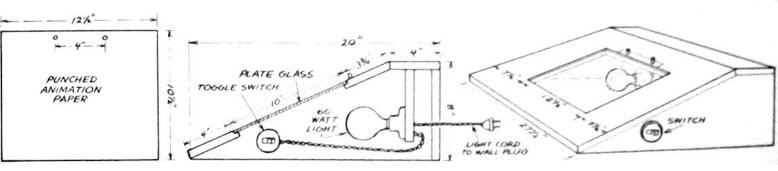
In the film studios this same basic idea is enlarged upon. Pencil drawings are made on paper $(10\%\% \times 12\%\%)$ by animators and their assistants; this work is then traced in ink on celluloid transparent sheets, and opaque colors are painted on. These series of inked and painted celluloids are then photographed in sequence on a painted background. The motion picture contains film thus made is then projected on a screen.

HOW TO MAKE A BOARD AND USE IT

You will be greatly aided by the use of an animation board in your study of this medium. Buy some unruled loose leaf note book paper about 10" x 12" which is punched with two holes. Construct pegs of wood or metal on your board (as illustrated) so that the paper fits snugly over the pegs. The glass should be the same size as the paper you use.

With the light on in your board you will be able to see thru several sheets of paper and note how your series of drawings vary in position. Visualize and plan your action, then start with a key drawing or "extreme." The next "extreme" in your action should be made on another sheet of paper, with the lights on so that you can see and work from your proceeding position. Follow this proceedure until all the extremes of your action have been "roughed" in, then make the drawings between the "extremes" to tie the action together.

If your background does not move to right or left, your scene is known as a "still." If the background moves your scene has a "pan" action, and is called a "pan" scene. Remember during a "pan" action, everything that touches the ground moves with and at the same speed as the "pan"; for example, feet that touch the ground in a walk or run, etc.



POINTERS ON ANIMATION TO REMEMBER

- (1) Work "rough" in laying out animation. Feel out the basic main construction of all your drawings in a scene first. Put in details later. The drawings on pages 38 and 39 are "roughs." "Clean-up" drawings (like pages 36 and 37) are made similar to tracings by working over "roughs" with a new sheet of paper on your animation board.
- (2) It is always a good idea to "anticipate" an action. In animating a character from one place to another, always go the other way first, as a baseball player draws back and cocks his arm before a throw.
- (3) To help accent a pose on a character, go past it a little when animating into the pose. As in a quick point, the finger goes out fast and past for an instant the position it finally stops at.
- (4) Get "overlapping action" whenever you can. That is when animating a character from one point to another, don't go there with all parts of the character at once—Arrive at different times. See page 33.
- (5) Always get a good "follow thru" action on loose moving things, like coat-tails, etc. see page 33.
- (6) Remember "squash and stretch." Feel that your character is an elastic mass and not rigid like a glass statue. This type of distortion will give "sock" to your work. The "recoil" is a type of squash drawing and is essential for a feeling of weight in your characters. Study the bouncing ball action on page 22 also see page 2 and 33.
- (7) Appreciate the value of a good silhouette in your key drawings. A good drawing should be able to be blacked in solid, and the resulting silhouette still register the meaning and attitude of the pose.
- (8) Be alert to use exaggerated foreshortening in animation. It is very effective. For example, a character is swinging a bat around horizontally. When the end of the bat comes out and towards the camera, force the perspective on the bat and make that end very big. When it's on the other side of the character make that end very small.

- (9) Make "pose" drawings. Visualize first, plan your scene with "poses," then animate. Make a few drawings of how you think the character should look at the most important points in the scene. These should be carefully thought out in regard to dramatic presentation, interpretation of mood, character, action, and humor. Now with these drawings as a guide, start with your first "pose" and animate your "extreme" drawings toward the next "pose." When you reach this second "pose" do not use it as an "extreme" in your action if it does not fit into the logical progression of things, but make another this ties in with your animation. Then proceed toward the next "pose," etc.
- (10) When possible always make a "path of action" and "spacing chart" of the action you are animating. For example, a character is running away from the foreground to off in the distance and over a hill. Make two lines charting the top and bottom of the character in its flight. Then mark off on this track the estimated position of each drawing. They will be seperated widely in the foreground and spaced closely in the distance. This procedure of mapping your action will increase its accuracy and save time.
- (11) Under "timing" are these points: Vary the speeds of actions in a scene. A change of pace is usually highly desirable in animation. Learn the value of a "hold," that is just the right amount of time to linger on a "pose" so that it will register with the audience for ait is worth. Study the art of going into and out at "holds," of cushioning into "holds," of when to "freeze" a "hold" dead still, and when to keep up subtle animation during a "hold" to give it that breath of life. These points and others under "timing" are the essence of the art of animation as they are also at the art of acting, and an animation is the actor of the animated cartoon film. It is your job as it is an actor's to partray emotions, and that is highly individual. That is also cating the art of acting and an animation. There is enough meat in these "pointers" for another book on adventised animation. Another subject untouched is the technical like pan movements—camera trucks—exposure theets, etc. I have purposely stayed away from this stuff as it confuses the beginner.

Now go to it! And good heat!

Preston Blan

