ADVANCED ANIMATION

by

Preston Blair

THE CUTE CHARACTER

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 LINES AND BASE OF BODY.

NOTICE HOW ABOVE POINTS ARE USED IN THESE

LEARN HOW TO DRAW ANIMATED CARTOONS

CONSTRUCTION OF THE HEAD

THINK OF THE HEAD AS A ROUNDED MASS, EITHER BALL SHAPED, PEAR SHAPED OR EGG SHAPED AS THE CASE MAY BE. — IN ANIMATION THIS HEAD SHAPE MAY CHANGE PERSPECTIVE AND FORM A GREAT NUMBER OF TIMES DURING A SCENE. — TO SIMPLIFY MATTERS A CORRECT PERSPECTIVE FRAMEWORK SHOULD FIRST BE DRAWN, THEN THE DETAILS CONSTRUCTED OVER THIS FORM.
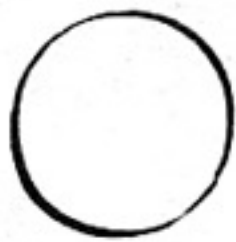
THIS CHARACTER STARTS WITH A ROUND GLOBE
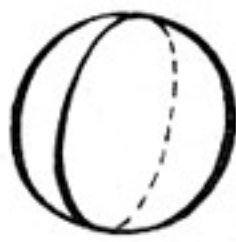
DRAW AROUND THIS A CIRCLE THAT WILL DIVIDE FACE IN THE MIDDLE LENGTHWISE. — THIS DETERMINES THE TILT OF HEAD.
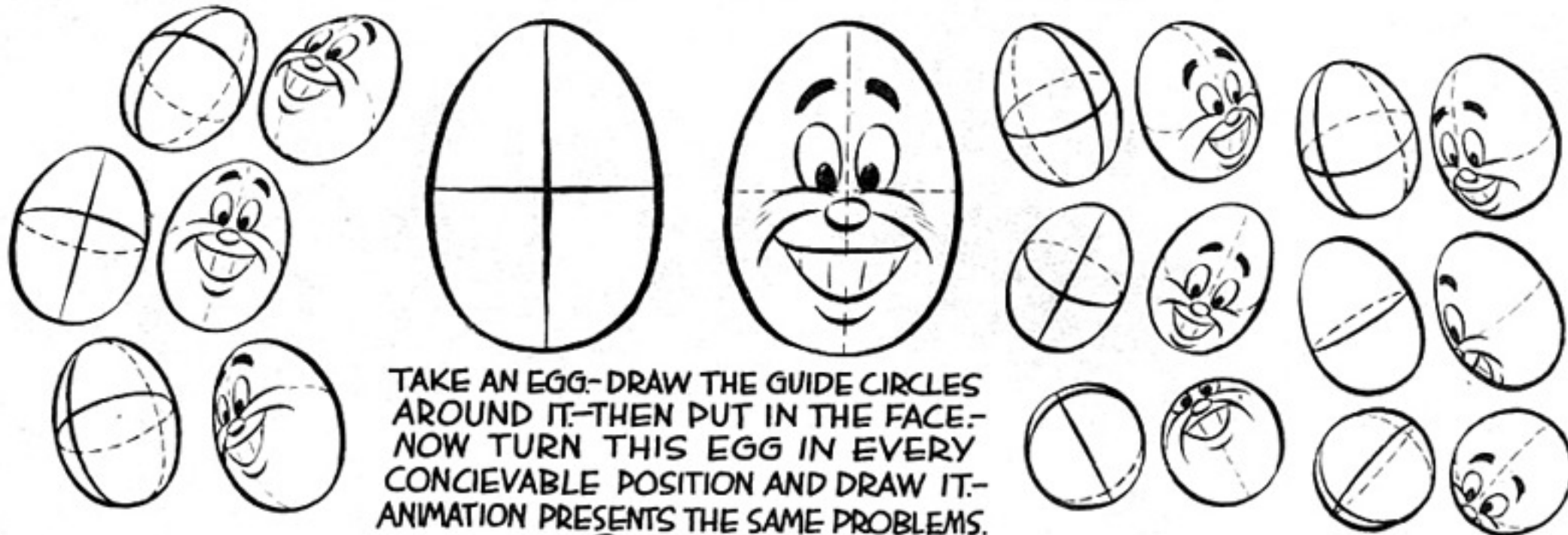
AT RIGHT ANGLES TO THIS PUT IN THE EYE LINE CIRCLE — THIS SETS FACE UP OR DOWN.

BASE OF EYES AND TOP OF NOSE TIE INTO EYE LINE. — NOTICE PERSPECTIVE MAKES LEFT EYE BIGGER THAT RIGHT

NOW THE DETAILS ARE PUT IN OVER THE FRAMEWORK.

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.

— NOW ADD A FEW DETAILS AND DRAW THESE HEADS IN EVERY POSITION USING THE ABOVE EGG AS A GUIDE. — CARTOON STUDIOS OFTEN MAKE SMALL CLAY MODELS TO AID THE ANIMATOR DRAW DIFFICULT CHARACTERS FROM ALL THE ANGLES CORRECTLY.
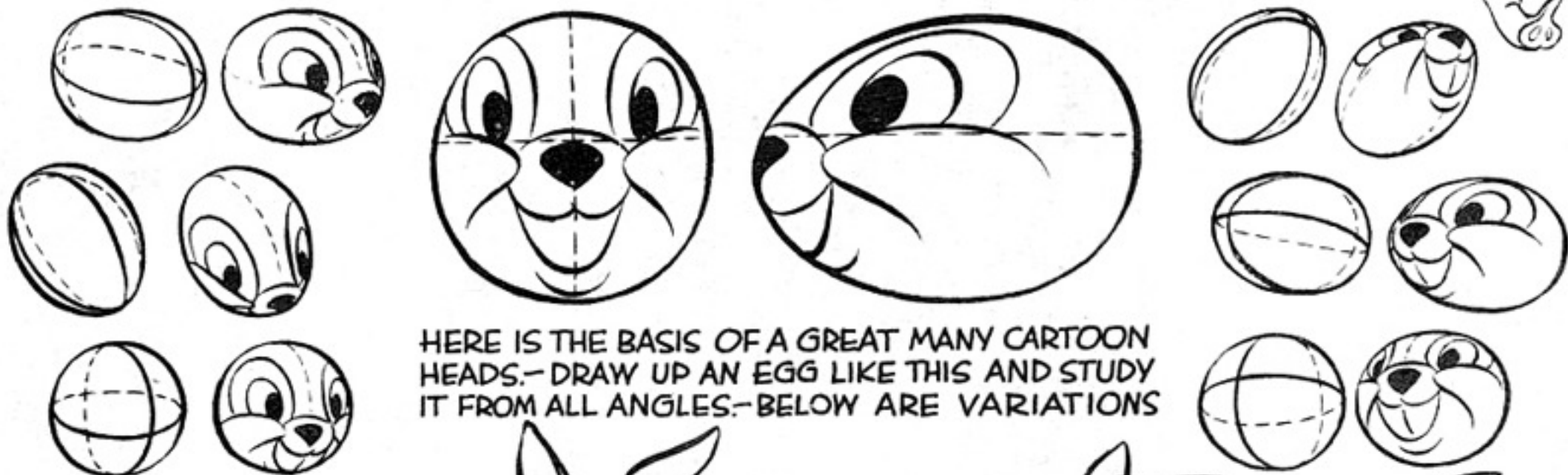
HERE IS THE BASIS OF A GREAT MANY CARTOON HEADS. — DRAW UP AN EGG LIKE THIS AND STUDY IT FROM ALL ANGLES. — BELOW ARE VARIATIONS
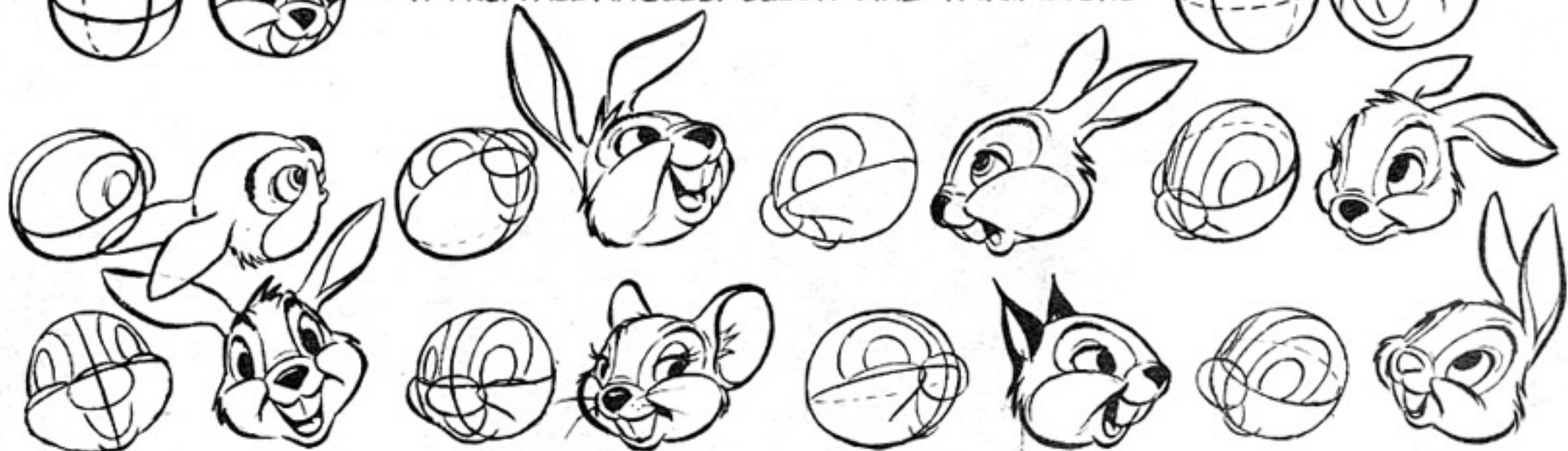
A NOTE ABOUT THE AUTHOR

Preston Blair, Cartoon Director, is one of the fine artists of Animation. Associated with the Disney Organization, he animated in "Pinocchio," "Bambi," and "Fantasia," in the later he designed the hippos. Later for Fred Quimby, shorts Producer at Metro-Goldwyn-Mayer, he designed and animated the highly successful, "Red Hot Riding Hood," directed "Barney Bear" shorts, and animated in "Anchors Aweigh." Blair is active in magazine illustration and fine arts, and is a member of the California and American Watercolor Societies. Recently when he won first prize in our National Print Exhibition at the Laguna Beach Art Gallery, I met him and suggested he make this book for you. I am sure it will prove interesting and helpful to all those studying this popular cartoon medium.

Walter Foster

MORE HEADS CONSTRUCTED
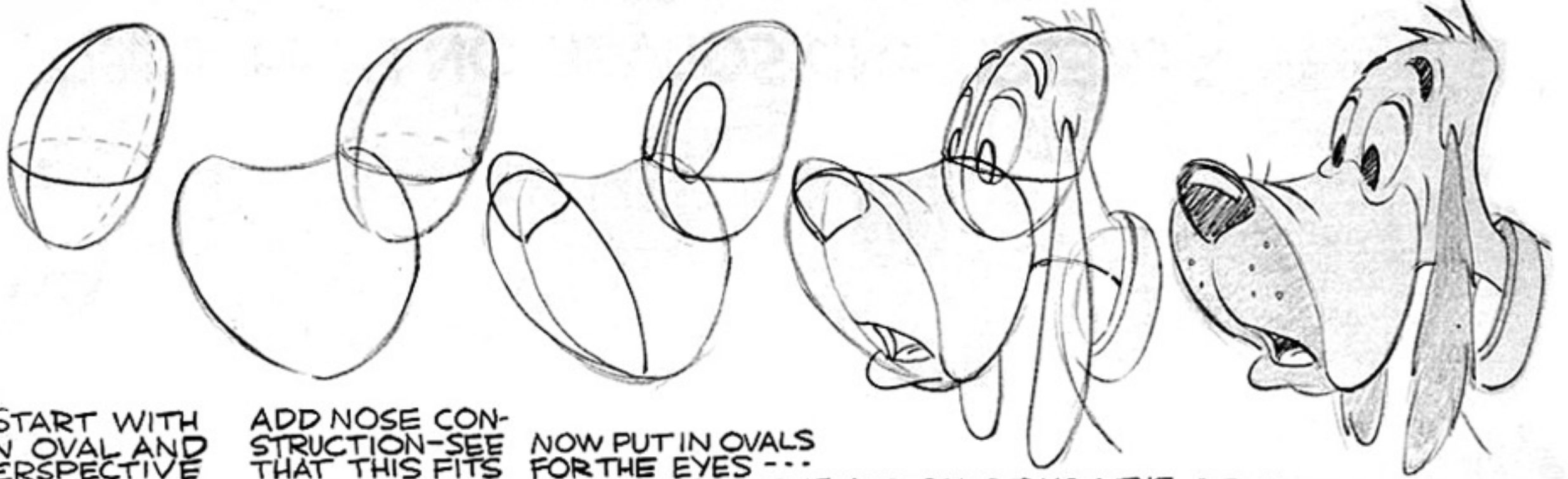
START WITH AN OVAL AND PERSPECTIVE GUIDE LINES.

ADD NOSE CONSTRUCTION—SEE THAT THIS FITS SOLIDLY ON,

NOW PUT IN OVALS FOR THE EYES - - -
WATCH PERSPECTIVE AND CONSTRUCT THE REMAINING DETAILS

ALL ANIMATED CARTOON CHARACTERS CAN BE REDUCED TO A BASIC FORMULAE- THIS MAKES THEM EASY TO MASTER AND INSURES UNIFORMITY THRUOUT A FILM ALTHO SEVERAL ARTISTS WORK ON THE SAME CHARACTER

STUDY THE BASIC FORMULAE I HAVE INDICATED HERE, THEN DRAW THIS DOG IN OTHER POSITIONS


HERE ARE SOMEMORE TO PRACTICE ON

We are grateful to Fred Quimby, Shorts Producer, at Metro-Goldwyn-Mayer, for his permission to allow some of M.G.M's. excellent cartoon characters to appear in this book, among them Tom and Jerry that riotously funny team of cat and mouse, that have captured the hearts of all of us, including the Motion Picture Academy judging from the Oscars the two have received with Fred Quimby. Yes, our hats are off to these fellows and M.G.M., creators of the most entertaining and amusing cartoons in recent years!
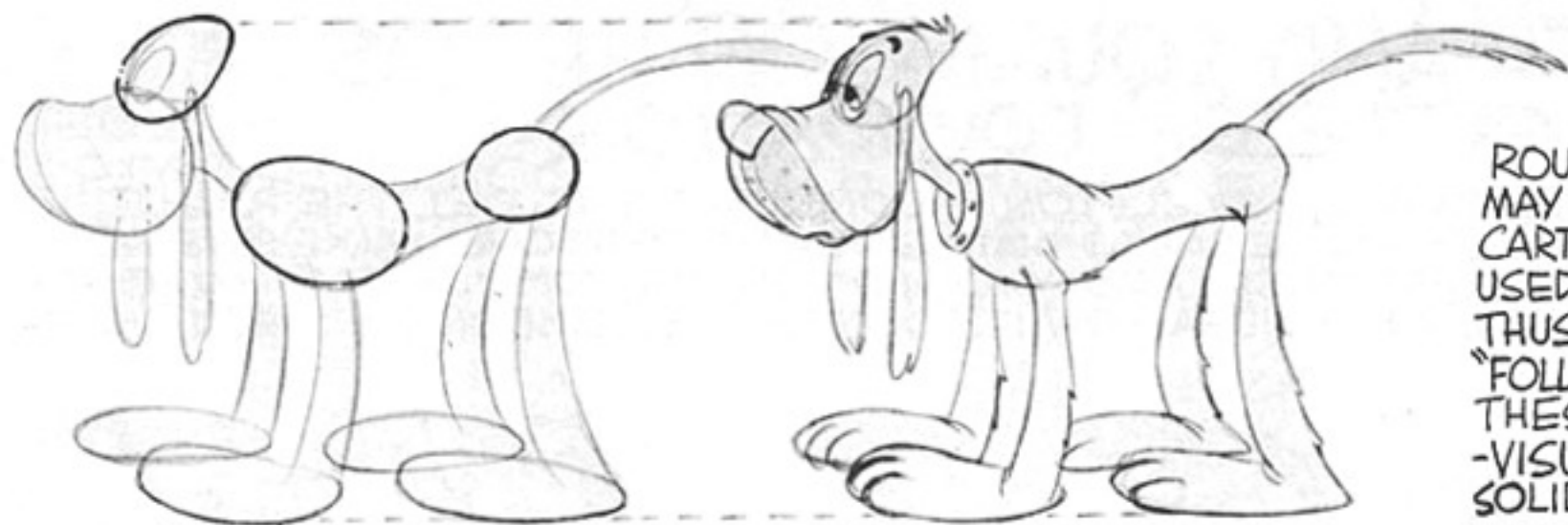
STRETCH AND SQUASH ON HEADS
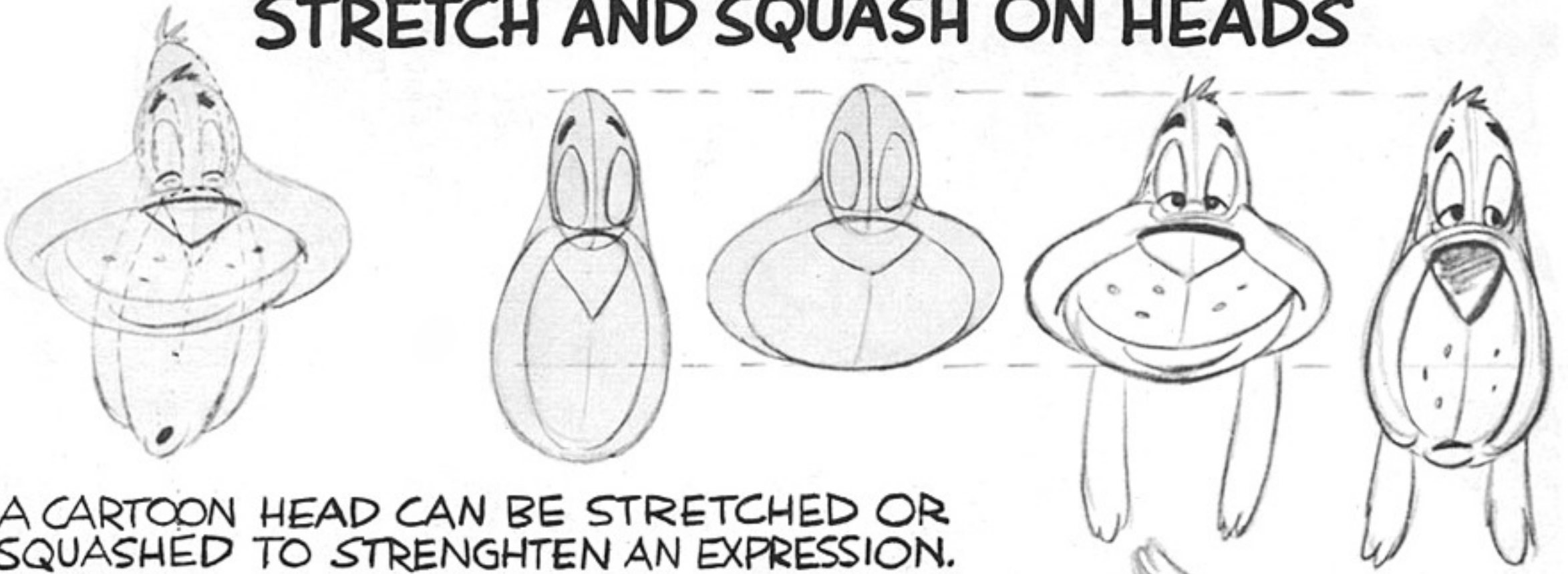
A CARTOON HEAD CAN BE STRETCHED OR
SQUASHED TO STRENGHTEN AN EXPRESSION.
··YOU WILL NOTICE THAT THE OVAL
CONTAINING THE EYES DOES NOT CHANGE
GREATLY·MOST VARIABLE IS MOUTH AREA··
SMALL DETAILS ALSO RE-ACT LIKE THE
LARGE FORM IN WHICH THEY ARE IN.
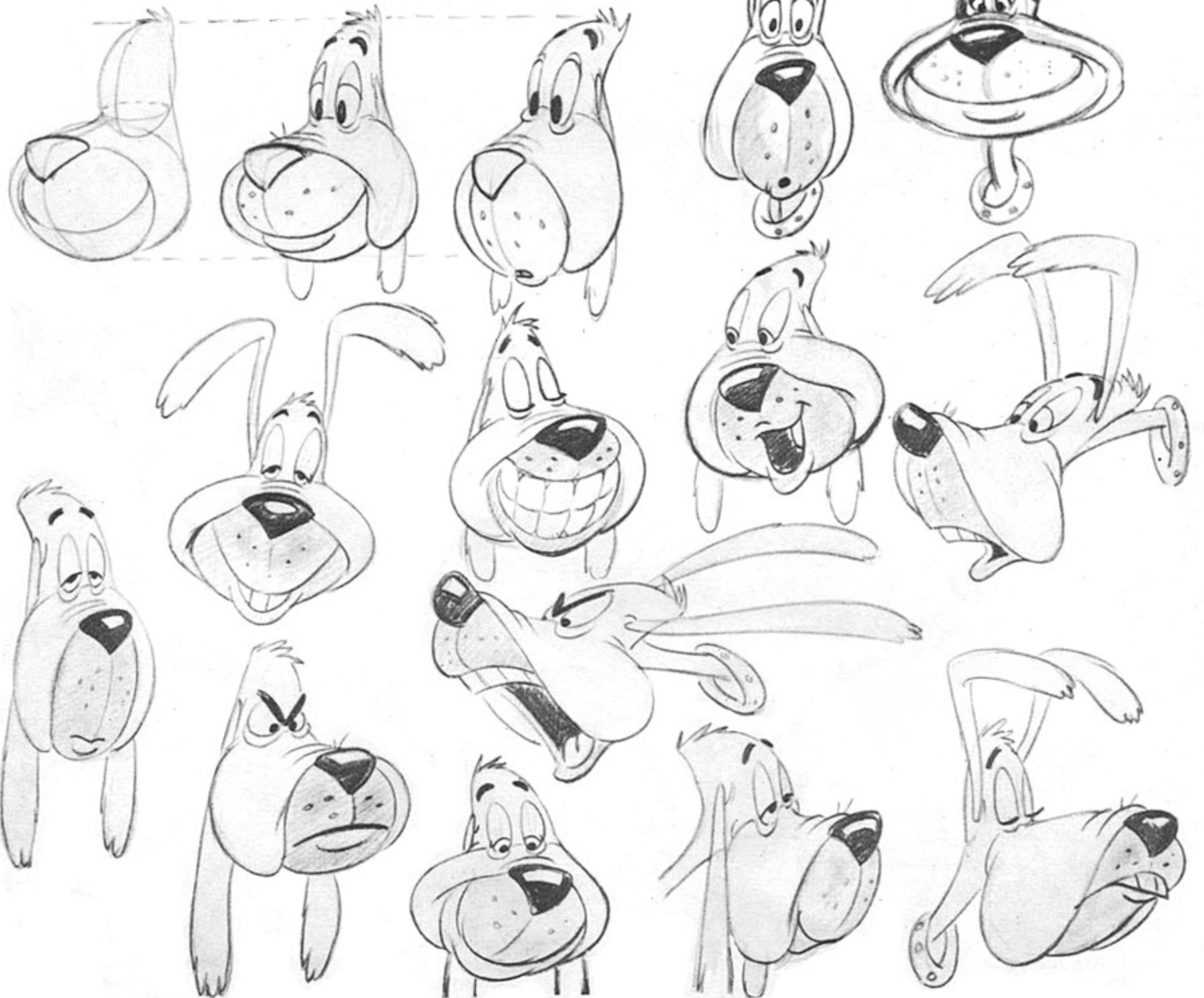
BODY BUILT FROM ROUNDED OR CIRCULAR FORMS

THE ANIMATED CARTOON CHARACTER IS BASED ON THE CIRCLE AND ROUNDED FORM -- AS SEVERAL PEOPLE MAY WORK ON THE SAME DRAWING IN A CARTOON STUDIO, THE ROUNDED FORM IS USED DUE TO ITS SIMPLICITY -- ANIMATION IS THUS EASIER -- ALSO CIRCULAR FORMS "FOLLOW THRU" BETTER ON THE SCREEN -- STUDY THESE DRAWINGS I HAVE ANALYZED -- -- VISUALIZE ALL FORMS AS SOLID MASSES WITH 3 DIMENSIONS.
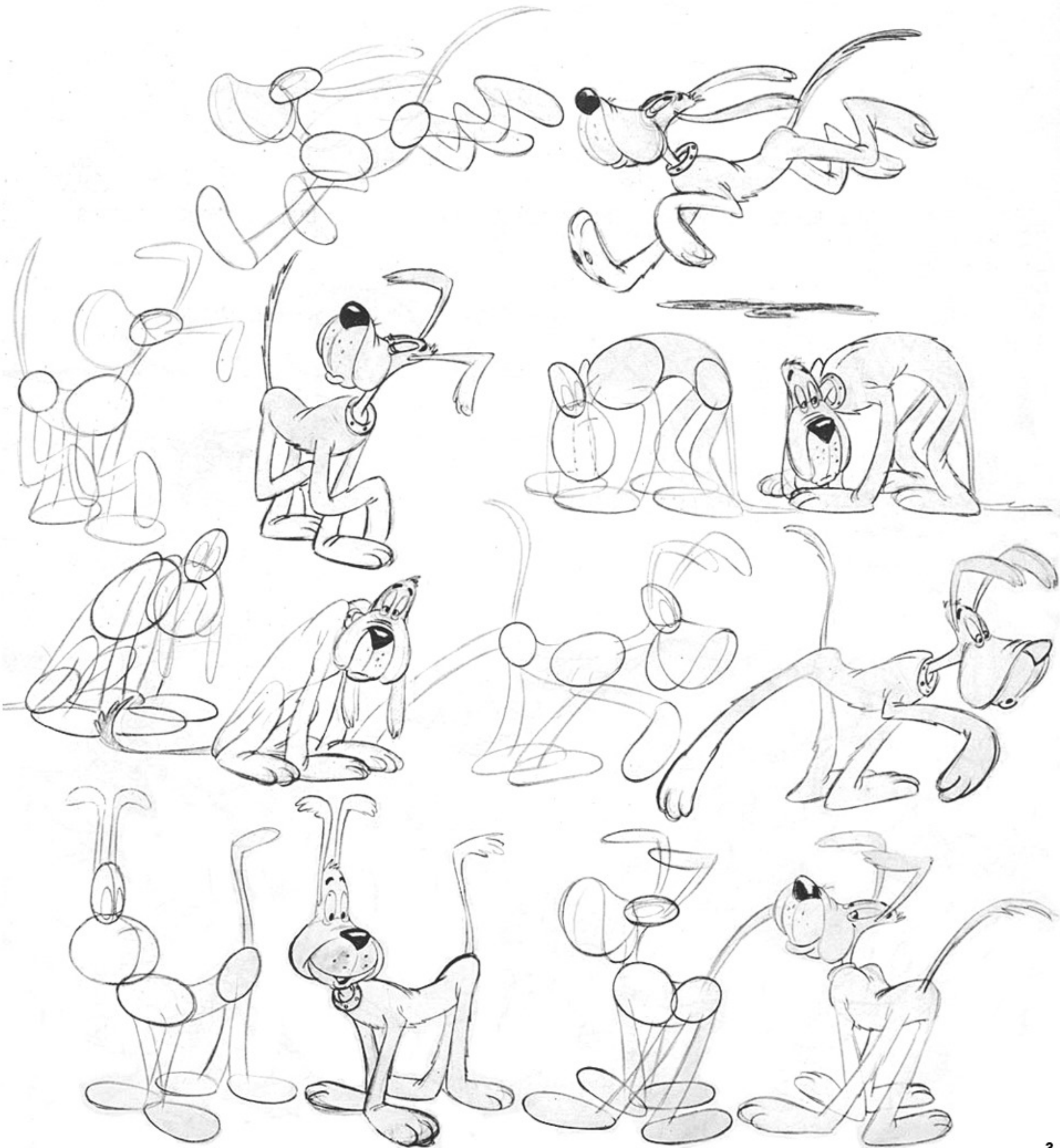
THE SKELETON FOUNDATION

BUILD THE CARTOON UP FROM A ROUGH SKELETON -- DON'T EXPECT TO GET THE RIGHT
SKELETON THE FIRST TRY ALWAYS --NO ONE CAN DO THAT--EXPERIMENT-DISCARD-MAKE SEVERAL
THEN PICK THE BEST ONE -- HERE ARE THE ACADEMY AWARD WINNERS "TOM + JERRY" (WHO
APPEAR IN M.G.M. PICTURES) TO GIVE YOU AN IDEA HOW IT'S DONE,--WORK LOOSE ON CONSTRUCTION.
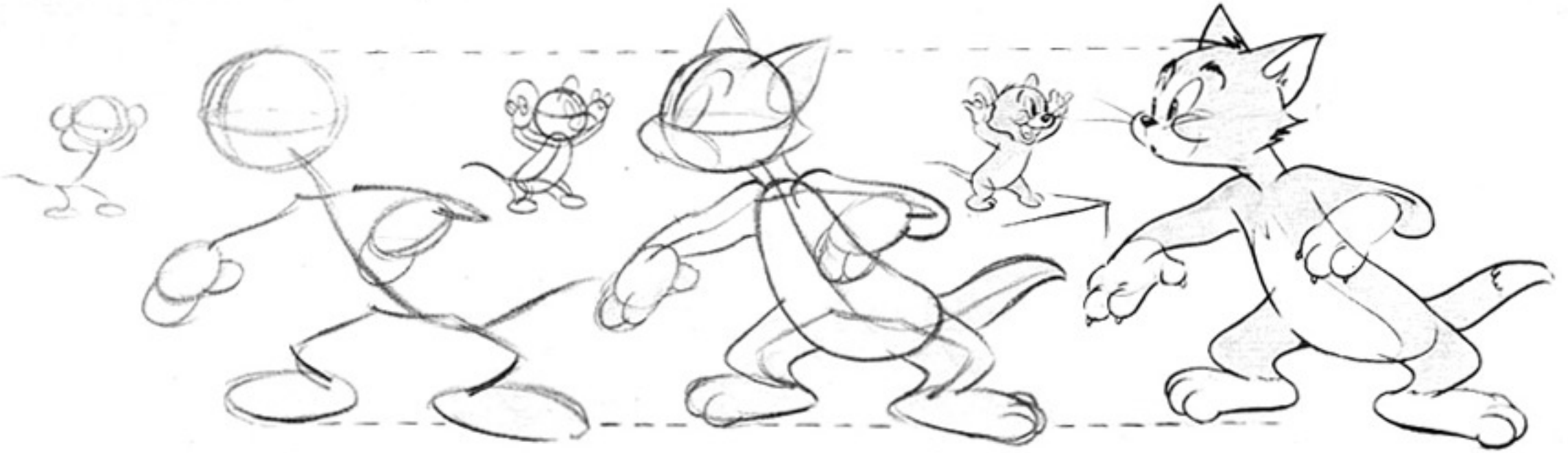
WORK OUT A SKELETON—CONSTRUCT BODY MASSES AROUND IT—THEN BUILD DETAILS OVER THIS

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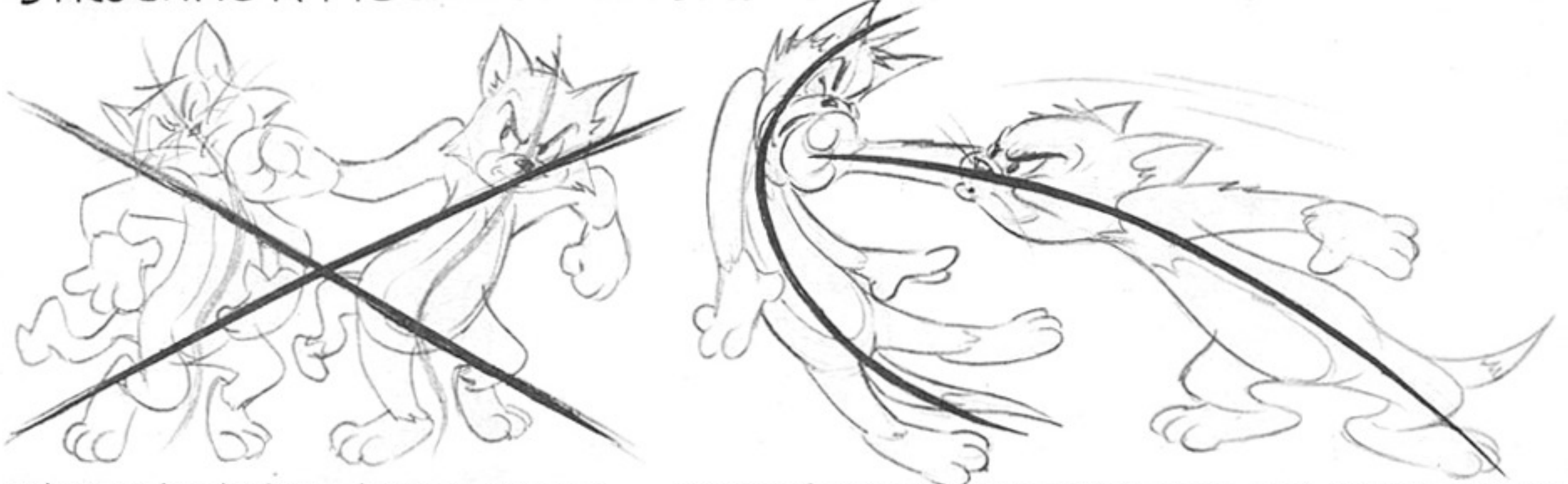
WRONG! LINES OF ACTION UNFIT --- RIGHT! LINES OF ACTION FIT AND ARE ACCENTUATED

WRONG   RIGHT   WRONG   RIGHT
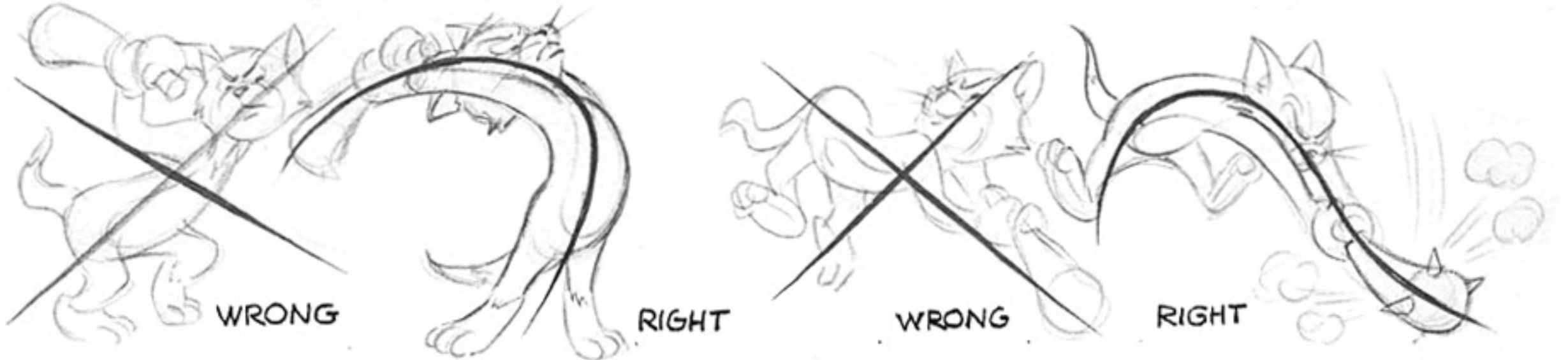
BELOW "TOM+JERRY" M.G.M. STARS, ILLUSTRATE THIS CARTOON LAW
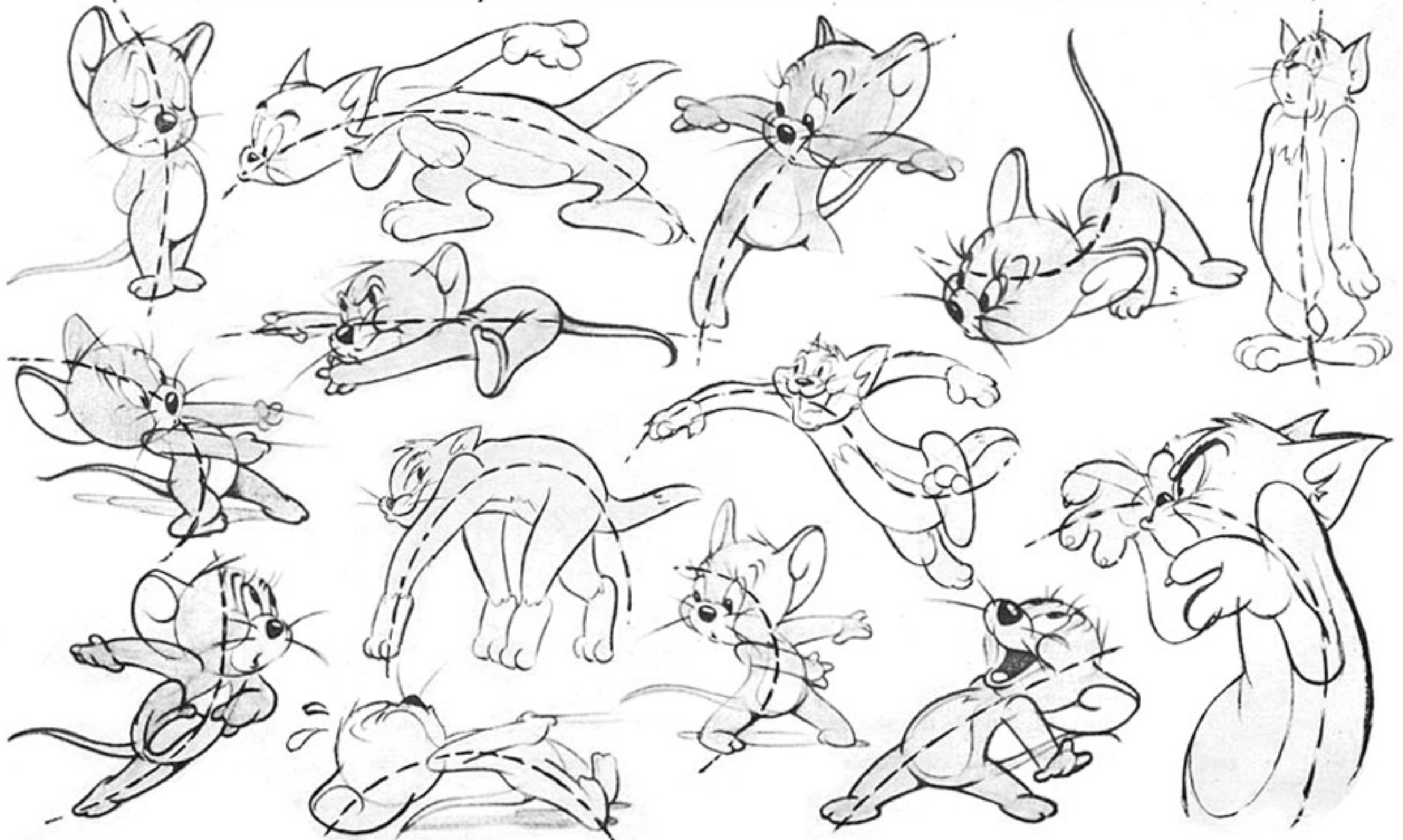
In constructing an animated character, visualize it as a three dimension puppet that you are joining together with solid masses. Each part has a definite place to fit according to a formula.
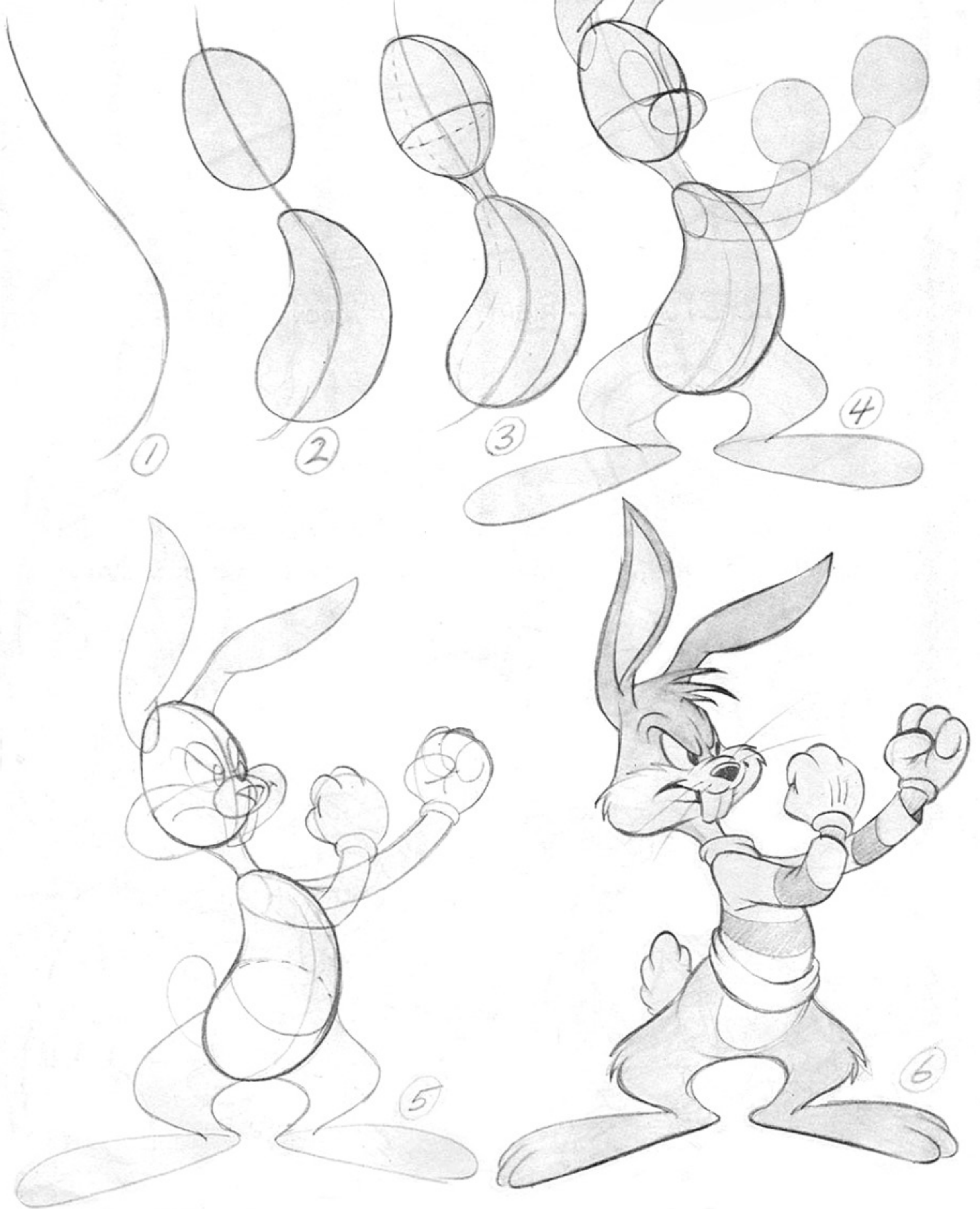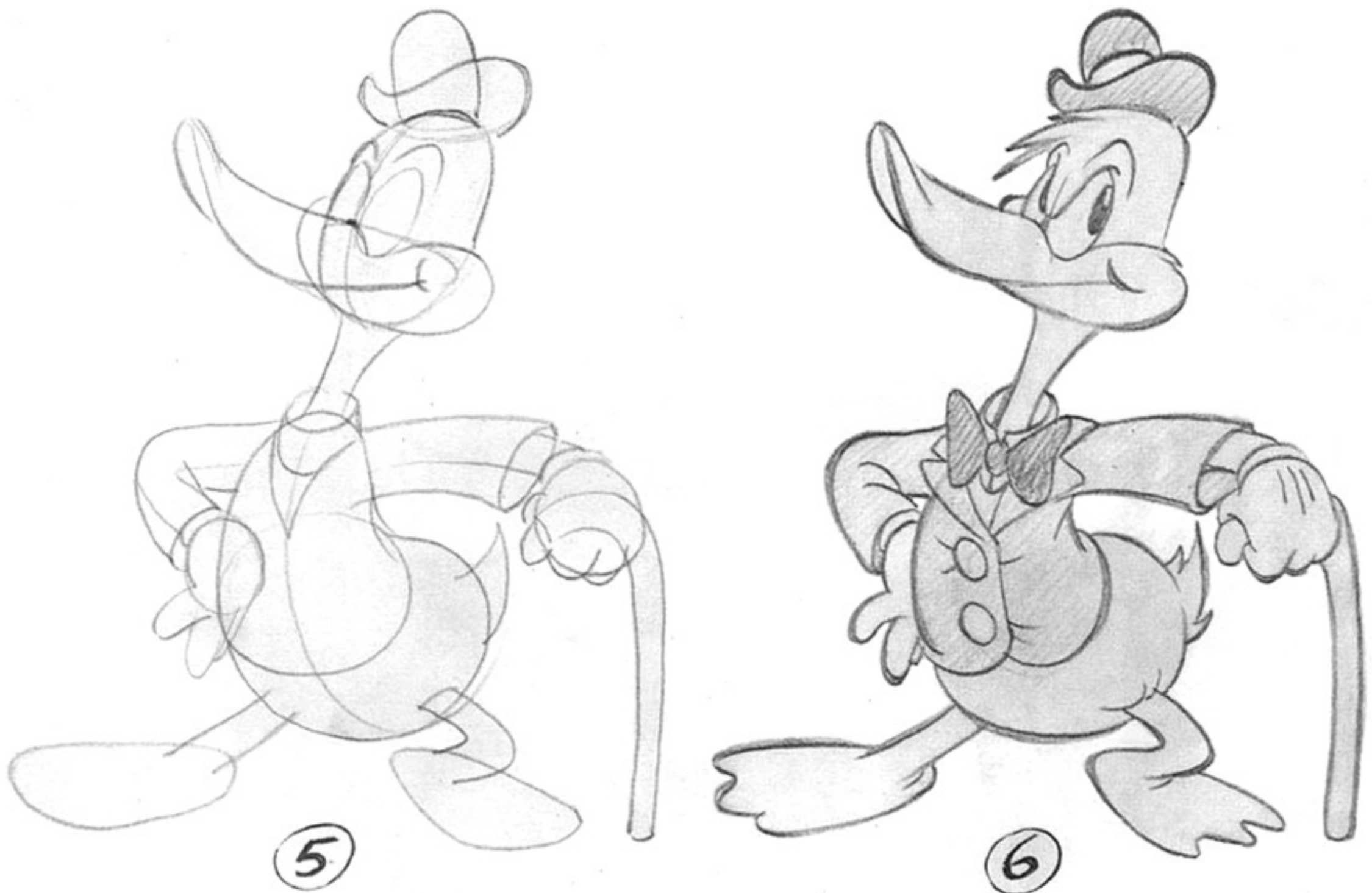
These are progressive steps taken by an animator in drawing a cartoon character
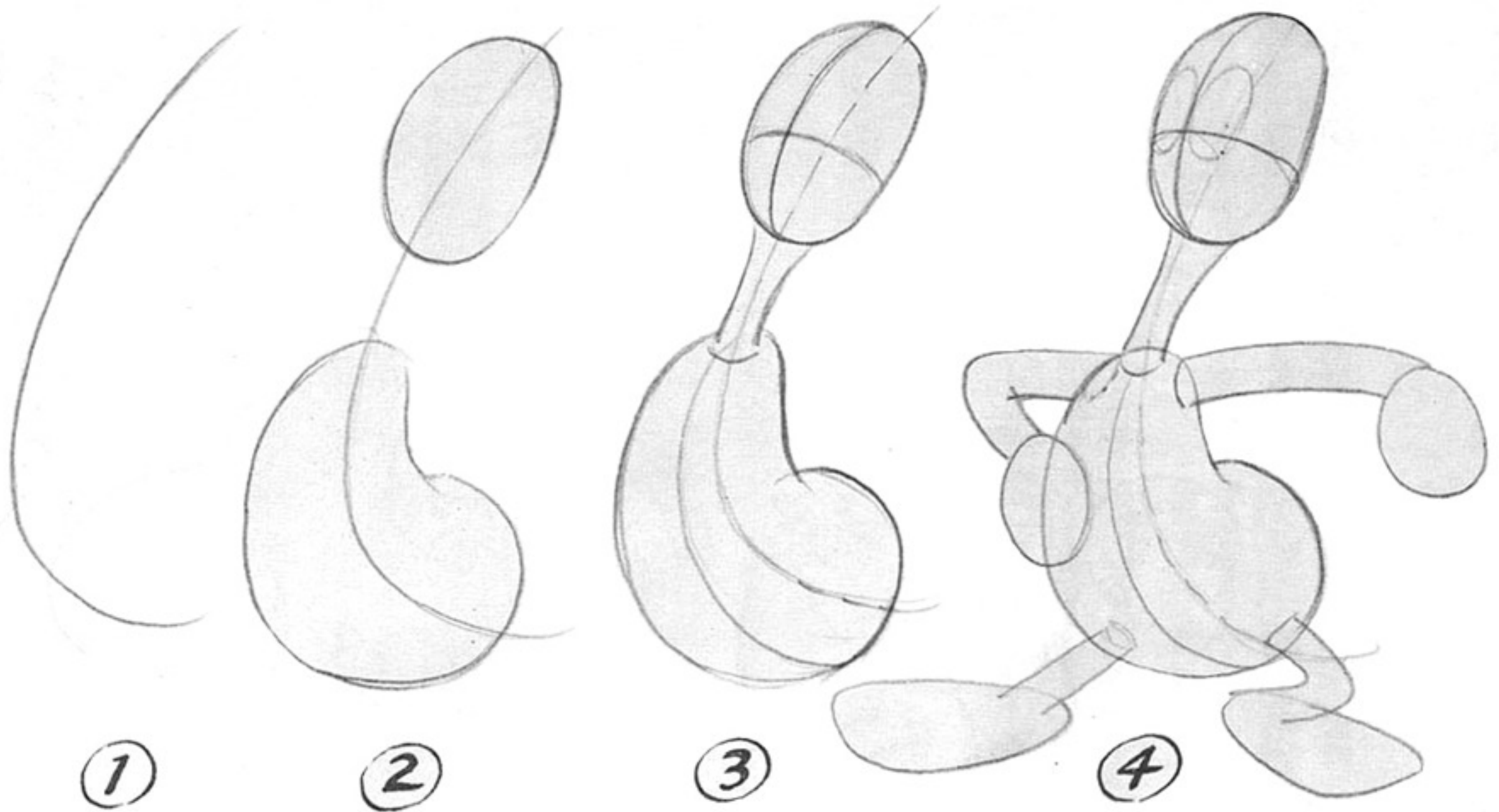
1. Draw in "Line of Action" to establish general stance of figure.

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.

HERE ARE SOME ROUGH SKETCHES
OF AN OWL—TO SHOW YOU HOW A
BIRDS WING CAN BE HANDLED—IT
CAN BE STRAIGHT, OR AT OTHER TIMES
TAKE ON ALL THE CHARACTERISTICS
OF A HAND WITH THE FEATHERS AS FINGERS.
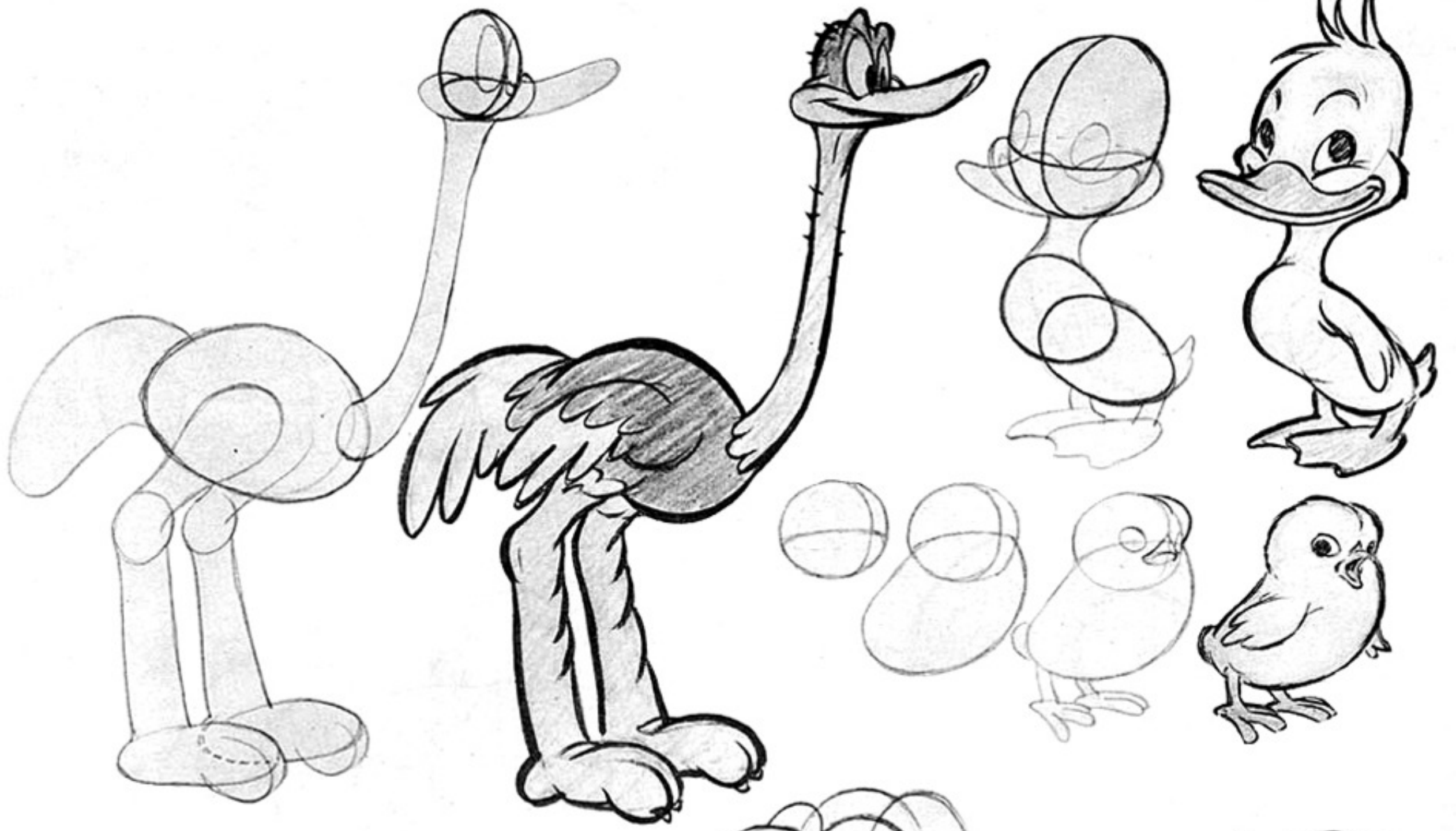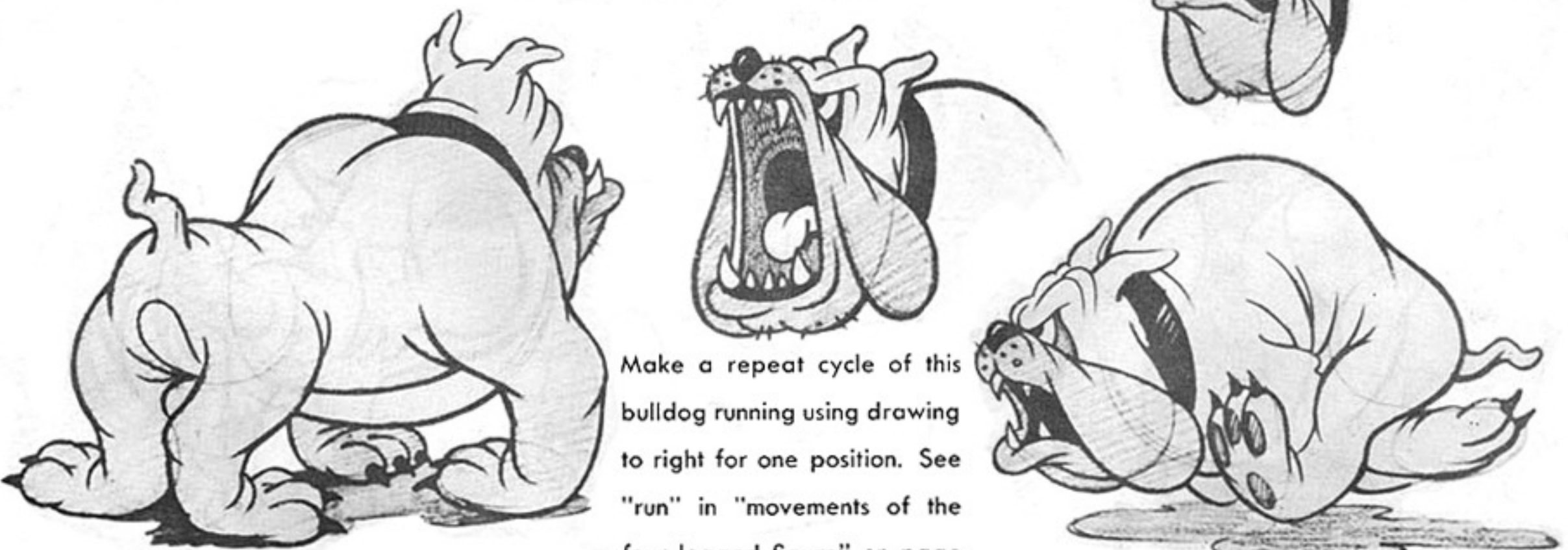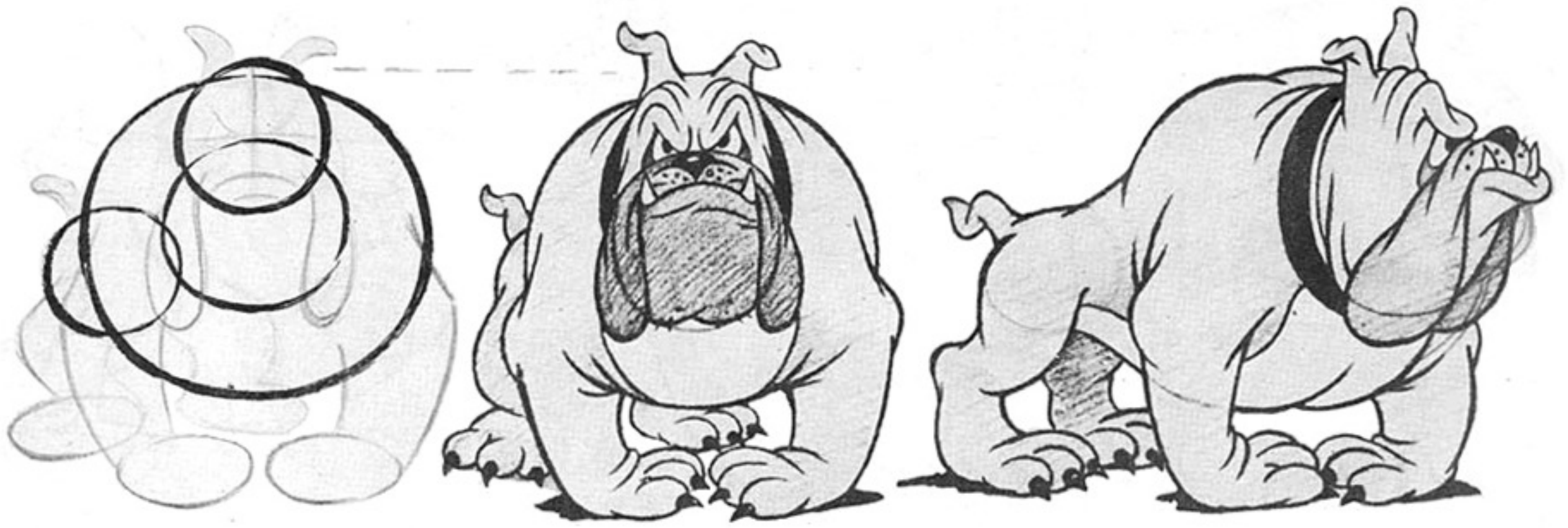
Make a repeat cycle of this bulldog running using drawing to right for one position. See "run" in "movements of the four legged figure" on page 25 for guide.

HERE ARE SOME IDEAS FOR DRAWING A SQUIRREL--AS IN CUTE CHARACTERS, HEAD IS LARGE.--IMPORTANT ARE THE TWO FRONT TEETH.
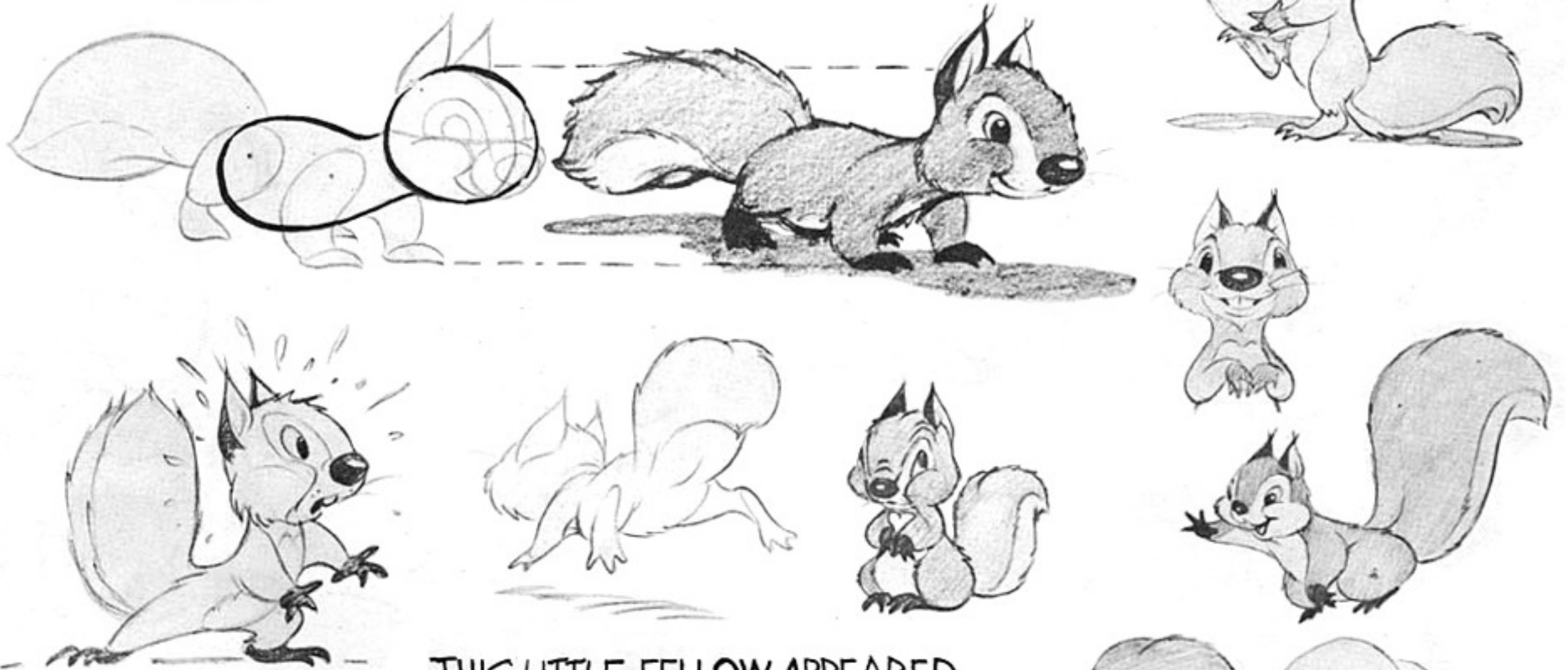
THIS LITTLE FELLOW APPEARED IN AN M.G.M. CARTOON WITH BARNEY BEAR AND HE WAS A RIOT--BELOW IS HOW HE COMPARED IN SIZE TO BARNEY

THE "SCREWBALL" TYPE

IN THIS FORMULAE YOU WILL RECOGNIZE SOME FEATURES THAT ALL THESE COCKY-WISE GUYS HAVE IN COMMON

ELONGATED HEAD NOT TOO BIG
SKINNY NECK

EXAGGERATED FEATURES

PEAR SHAPED BODY

LOW FORE-HEAD

½

BIG FEET

LITTLE OR SKINNY LEGS
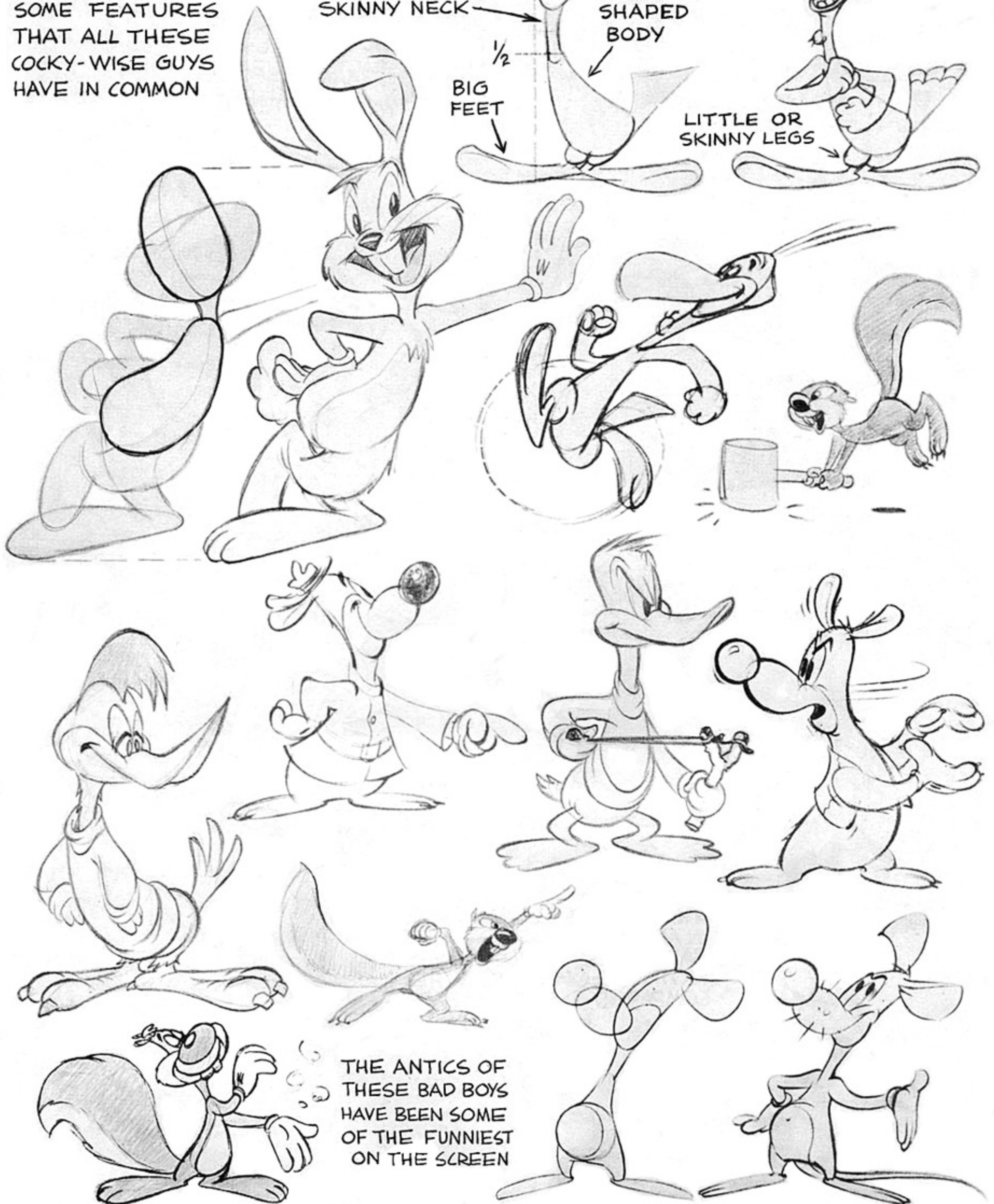
THE ANTICS OF THESE BAD BOYS HAVE BEEN SOME OF THE FUNNIEST ON THE SCREEN

GOOFY CHARACTERS

HERE IS THE BASIC FORMULAE FOR GOOFY TYPES THAT ACT LIKE A SIMPLE SIMON CLOD-HOPPER:

LONG SKINNY NECK.

HUMP BACK - STOOP SHOULDERED.

LONG DROOPY ARMS.
WITH BIG HANDS.
OVER-HANGING FANNY.

PANTS LOW AND LOOSE + BAGGY.

ENORMOUS + CLUMSY FEET.

SMALL HEAD - HELD FORWARD

HAIR HANGS OVER EYES

DROOPY HALF-AWAKE EYES

BIG BEAK OR NOSE

BUCK TEETH

ABSOLUTELY NO CHIN! - THIS IS VERY IMPORTANT.

BOBBLING ADAMS APPLE

SUNKEN CHEST

BIG STOMACH PORTRUDES

LOW CROTCH IN PANTS

-- TRY DESIGNING A CHARACTER OF YOUR OWN USING THESE POINTS.

13
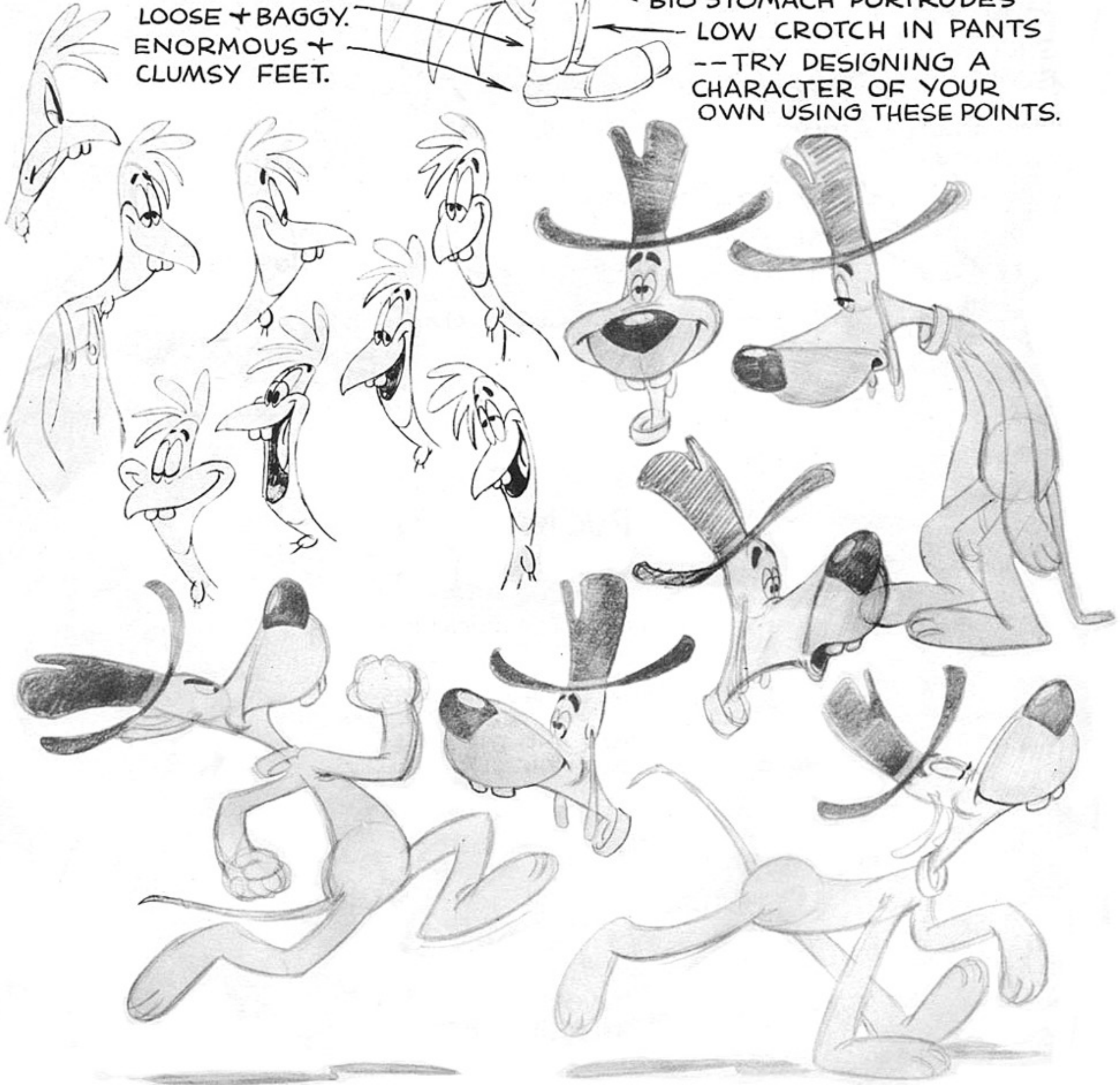
COMPARATIVELY
SMALL CRANIUM

HUGE CHIN
AND JOWLS

LITTLE EARS

HEAVY EYEBROWS
EYES CLOSE AND
BEADY

BIG BARREL
LIKE CHEST

HEAVY THICK
NECK WHEN IT
SHOWS

BIG LOWER
LIP STICKS
OUT

SMALL HIP
AREA

ARMS LONG
AND HEAVY

BIG HANDS

LITTLE
SHORT
HEAVY
LEGS

THE "HEAVY" PUGNACIOUS CHARACTER

ABOVE IS A FORMULAE
FOR THESE BAD BOYS
WHICH APPLIES ALSO
TO FOUR LEGGED TYPES
---- AS THE BEAR
BELOW AND THE BULL-
DOG ON THE NEXT PAGE.

THE CUTE CHARACTER

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 LINES AND BASE OF BODY.

HEAD LARGE IN RELATION TO THE BODY.

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

15

HANDS

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

Ⓐ   Ⓑ   Ⓒ   Ⓓ
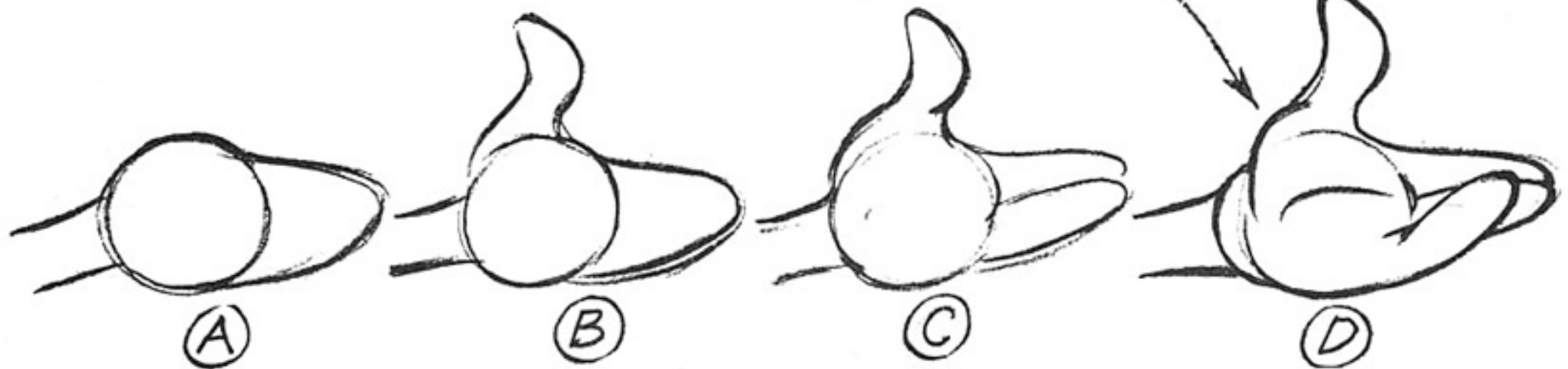
CARTOON HANDS ARE TRICKY — SO BELOW I'VE DRAWN AN AVERAGE HAND IN ALL KINDS OF POSITIONS TO GIVE YOU SOME IDEAS. — NOTICE THAT THE FINGERS SHOULD BE UNEVENLY PLACED TO PREVENT A MONOTONOUS QUALITY.
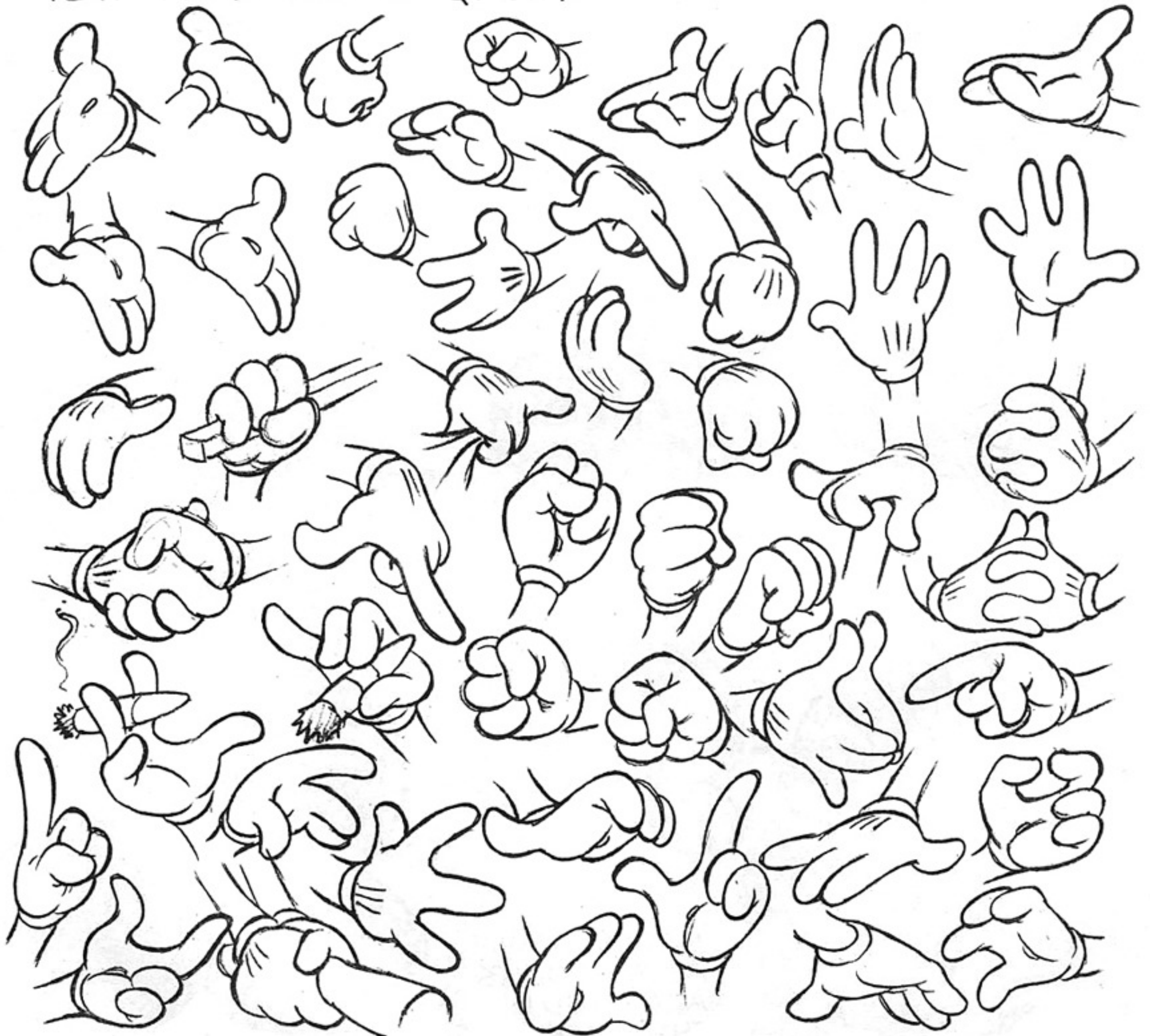
FACIAL EXPRESSIONS

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 "JERRY" MOUSE.

SKEPTICAL
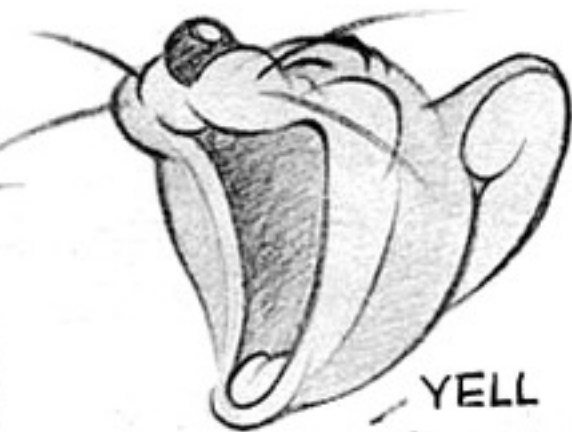
YELL

LAUGH

SHY

SMILE

TRAGIC THOUGHT

FRIGHT

MAD

TIRED

ALOOF

SURPRISE

IMPATIENT

ASHAMED

COY

WINK

AWE

SAD

SMILE

KNOCKED-OUT

CRYING

SNEER

SEVERE

CONTEMPT

BIRDS
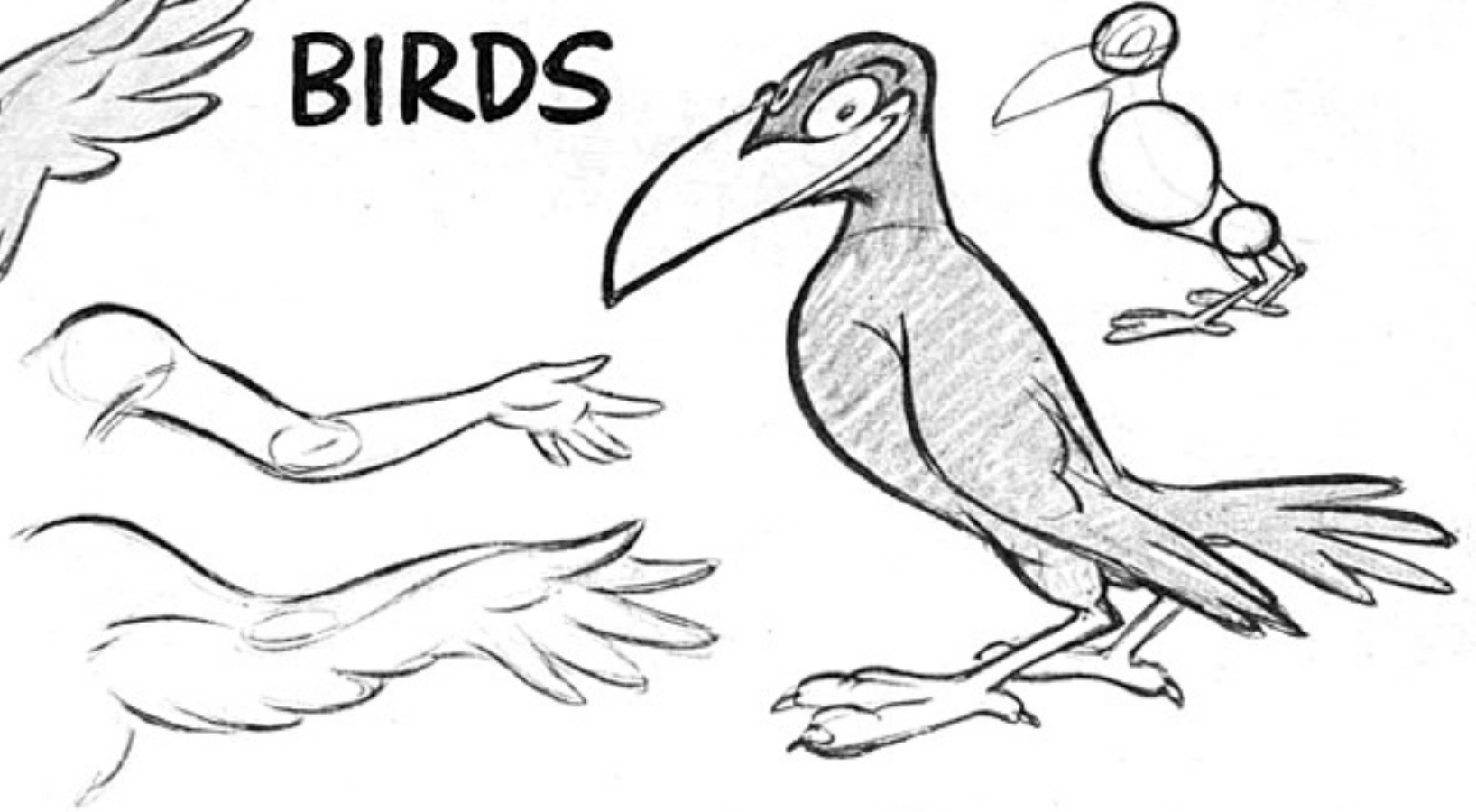
THE FLIGHT OF BIRDS
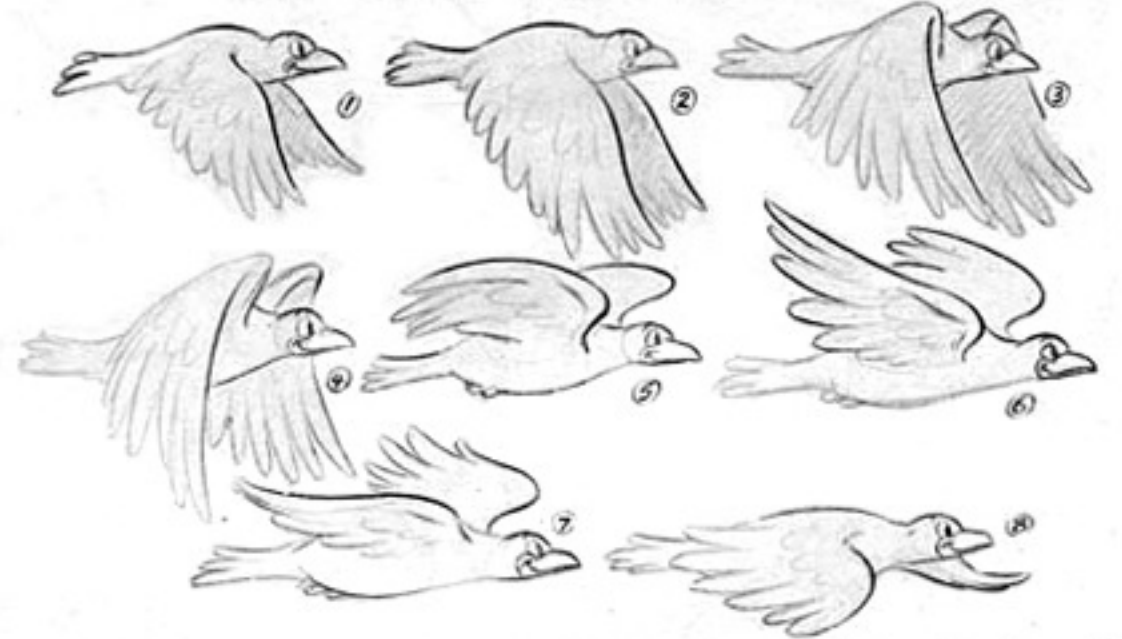
HERE IS A CYCLE OF A BIRD FLYING FROM BOTH THE FRONT AND SIDE. -- DRAWING ⑨ IS FOLLOWED BY DRAWING ①
DRAWING ⑧ ABOVE IS THE SAME WING POSITION AS DRAWING ⑥ BELOW, ETC. -- NOTICE THE WINGS FOLD UP AS THEY
RISE ON DRAWINGS ④⑤⑥⑦. -- THIS PART OF THE ACTION IS SLOWER (SO THERE ARE MORE DRAWINGS TO IT -- YOU WILL
THEREFORE SEE IT LONGER) -- AT THE TOP WINGS ENLARGE TO CATCH MORE AIR, ON ①⑧⑨②③ -- AND THEN ON ③ THEY
COME DOWN FAST, WIDE OPEN (JUST ONE DRAWING) -- TO GIVE BIRD THE PUSH THAT CARRIES HIM THRU THE AIR.
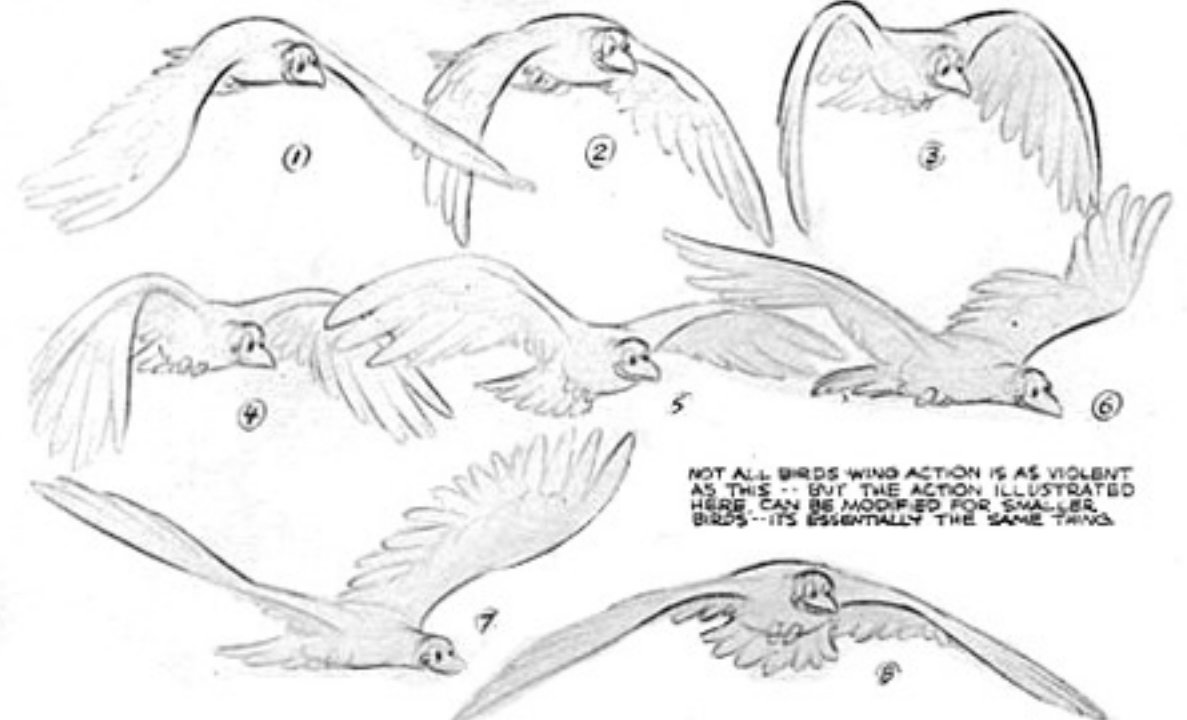
NOT ALL BIRDS WING ACTION IS AS VIOLENT
AS THIS -- BUT THE ACTION ILLUSTRATED
HERE CAN BE MODIFIED FOR SMALLER
BIRDS -- ITS ESSENTIALLY THE SAME THING.

18
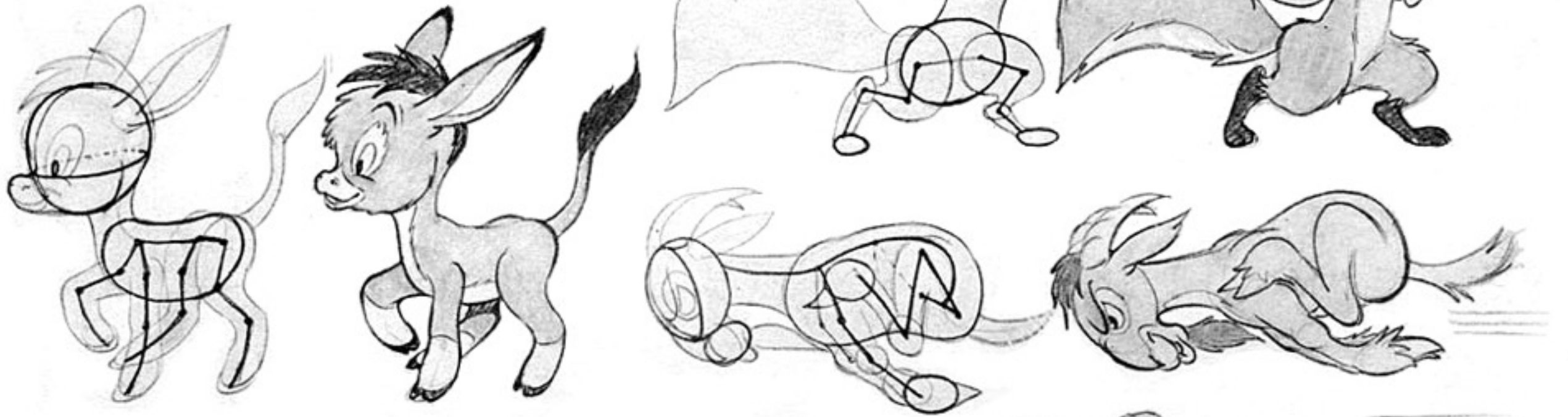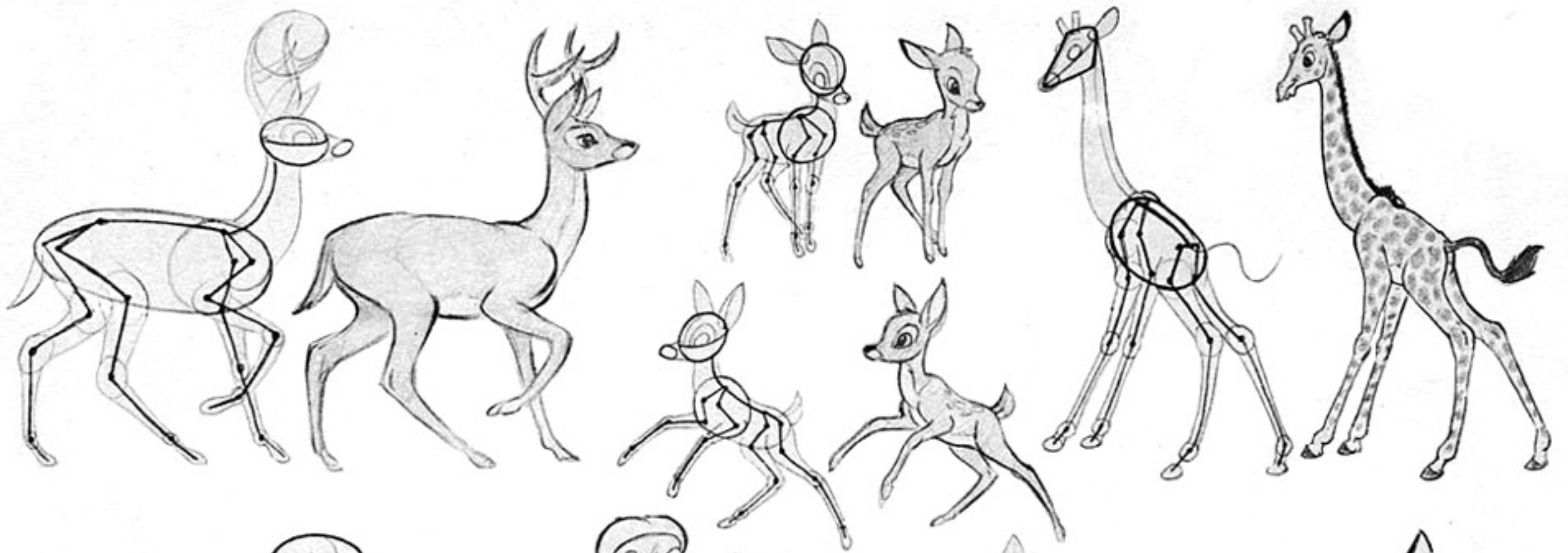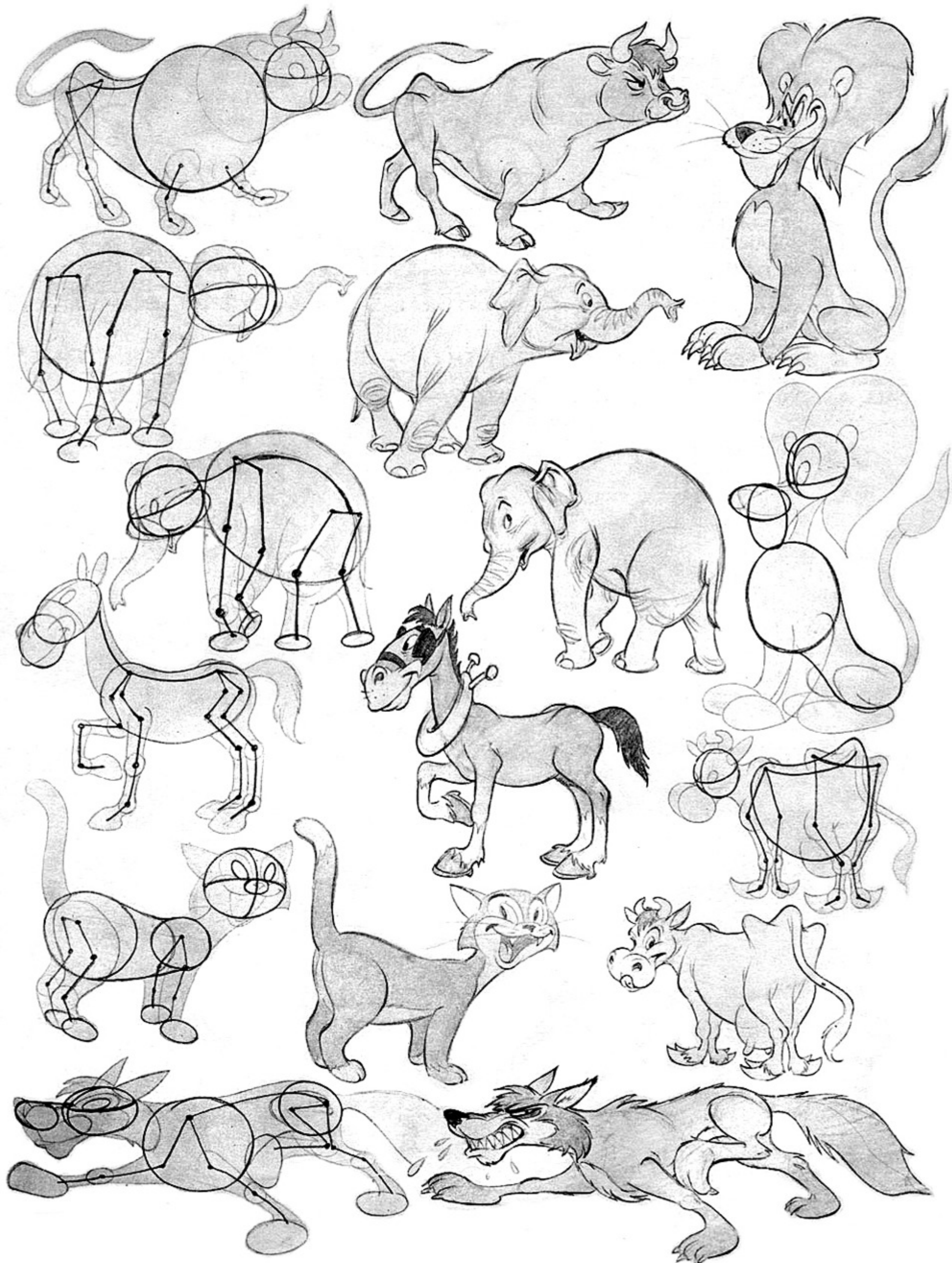
THE BASIC BOUNCING BALL ACTION

AS BALL FALLS - ITS
SPEED INCREASES
- - DRAWINGS ARE SPACED
FURTHER APART. - -

ON 5-7-12-14 NOTICE
BALL STRETCHES IN
FALLING + TAKING OFF.

BALL AT HIGHEST
POINT - - SLOWS UP - -
DRAWINGS SPACED
CLOSER - - RESUMES
NATURAL SHAPE.

AS BALL HITS
IT RECOILS - -
BECOMES
SQUASHED
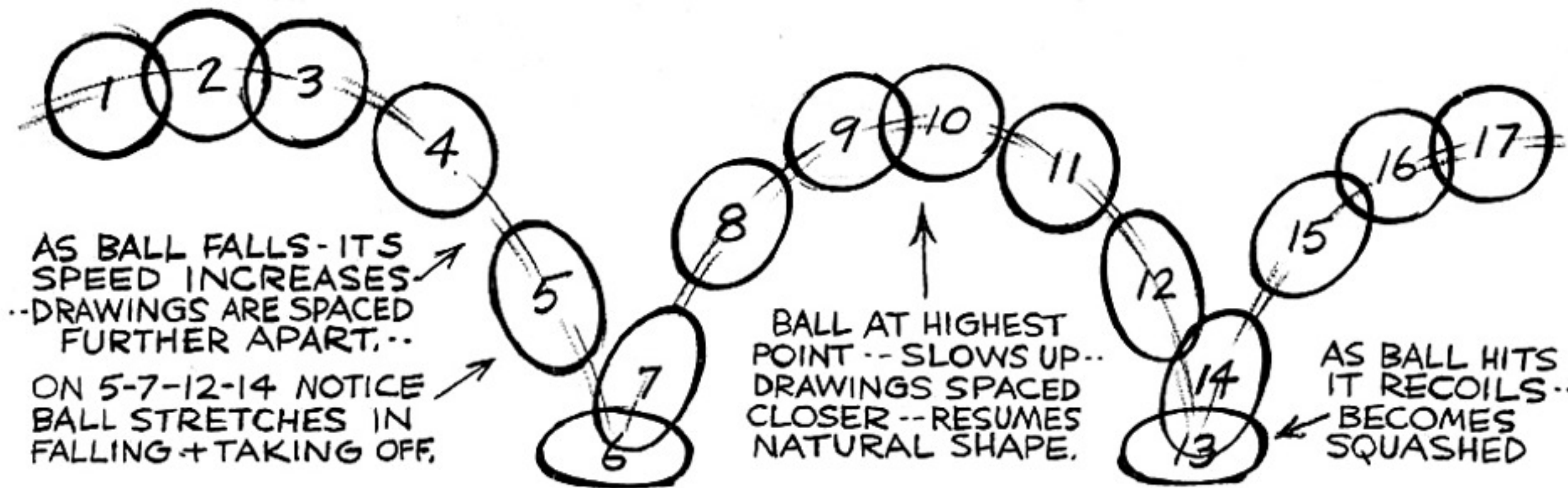
NOTICE BALL FOLLOWS A DEFINITE PATH OF ACTION - - STUDY CLOSELY THE
SPACING OF BALL ALONG THIS PATH - - NOTICE THE BASIC SIMILARITY OF THIS
BALL ACTION TO THE HOP AND JUMP BELOW; ALSO TO THE WALK-RUN-LEAP-SKIP-ETC.
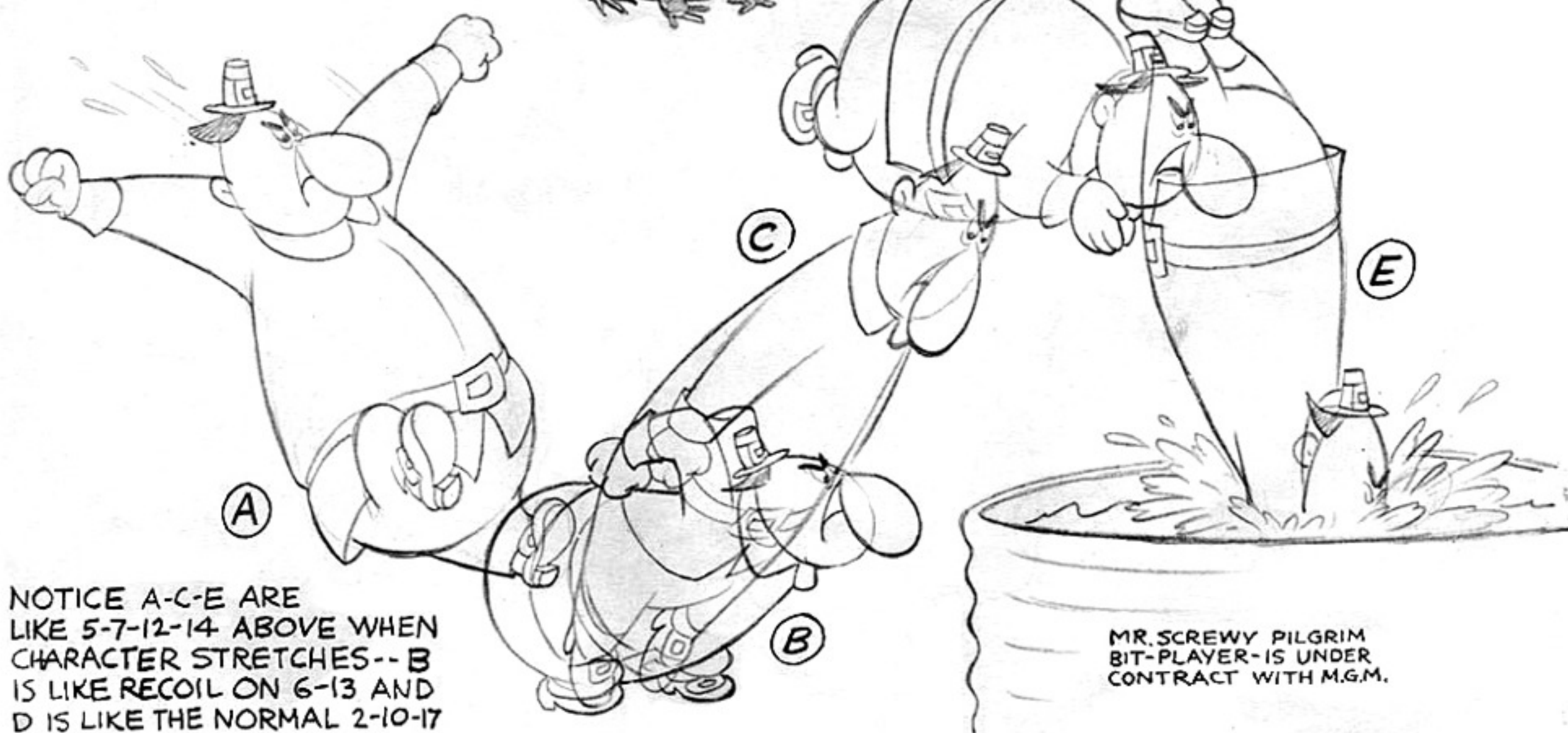
NOTICE A-C-E ARE
LIKE 5-7-12-14 ABOVE WHEN
CHARACTER STRETCHES - - B
IS LIKE RECOIL ON 6-13 AND
D IS LIKE THE NORMAL 2-10-17

MR. SCREWY PILGRIM
BIT-PLAYER-IS UNDER
CONTRACT WITH M.G.M.

MOVEMENT OF BODY MASSES

HERE ARE SOME SIMPLIFIED FIGURES IN ACTION TO SHOW
YOU THE TWIST AND TURN AND VARIATION OF PERSPECTIVE
IN THE MAIN BODY MASSES AS THE FIGURE ANIMATES--BUILDING
THE FIGURE IN SOLIDS MAKES ANIMATION EASIER TO "FEEL" OUT.
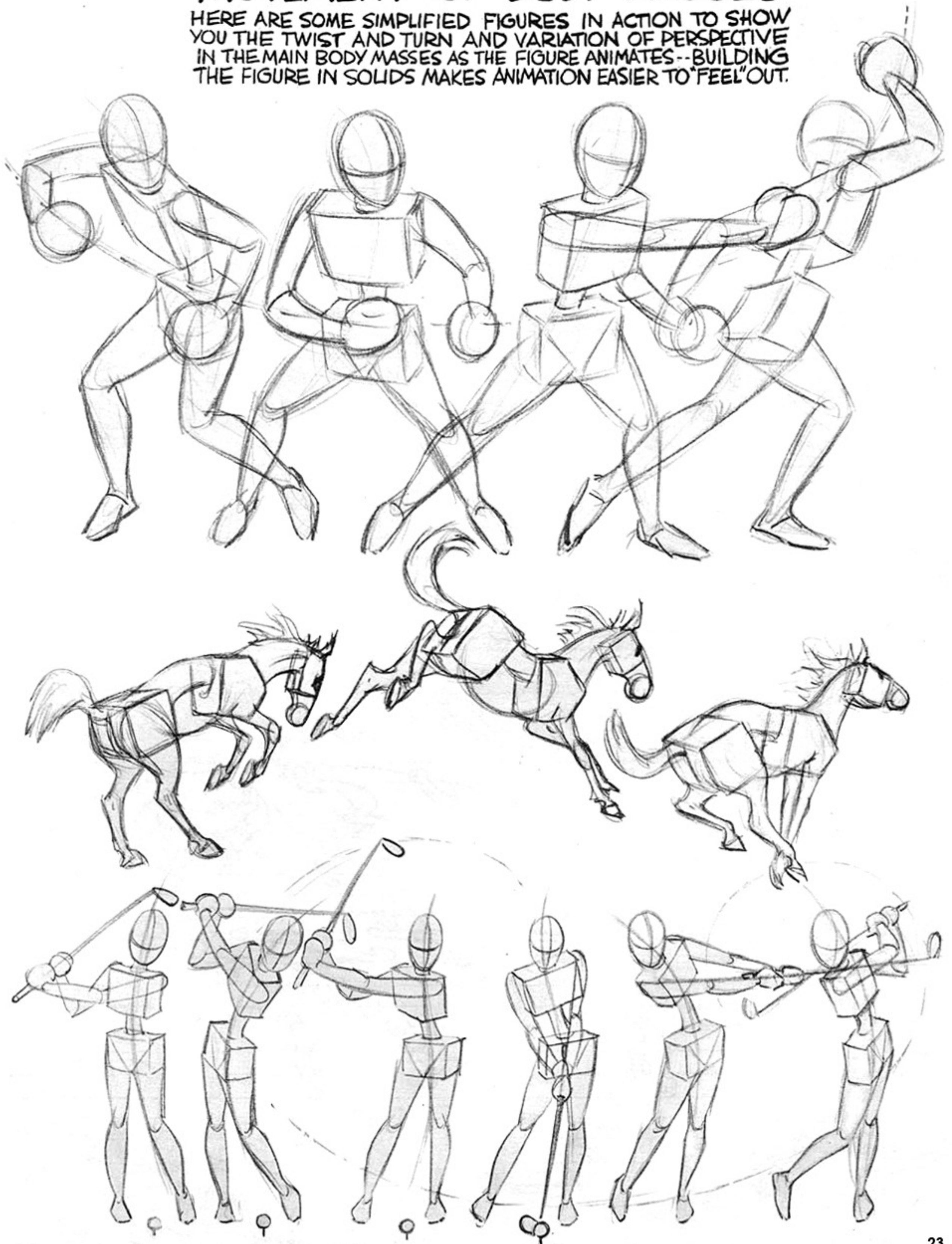
MOVEMENTS OF THE TWO LEGGED FIGURE

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.

WALK—

DOUBLE BOUNCE WALK—

STRUT —

SHUFFLE—

SNEAK—

RUN —

JUMP —

FAST RUN —

TIP TOE —

SKIP —
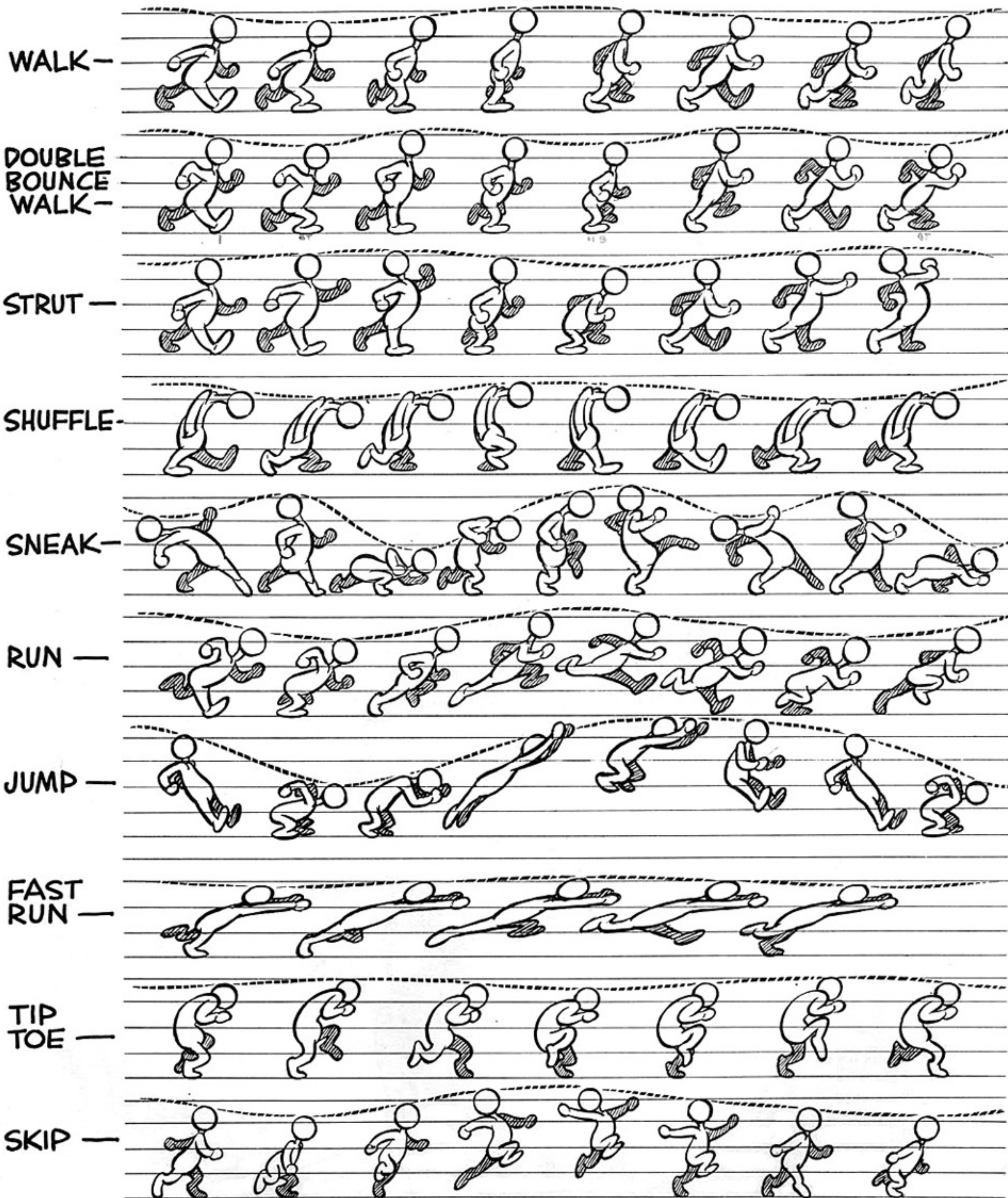
MOVEMENTS OF THE FOUR LEGGED FIGURE

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-

CANTER-

GALLOP-

SNEAK-

TIP-TOE-

STRUT-

SNIFF--
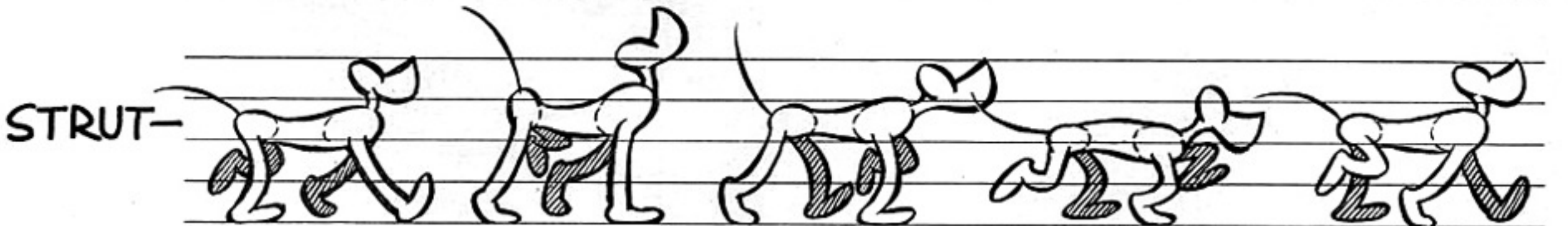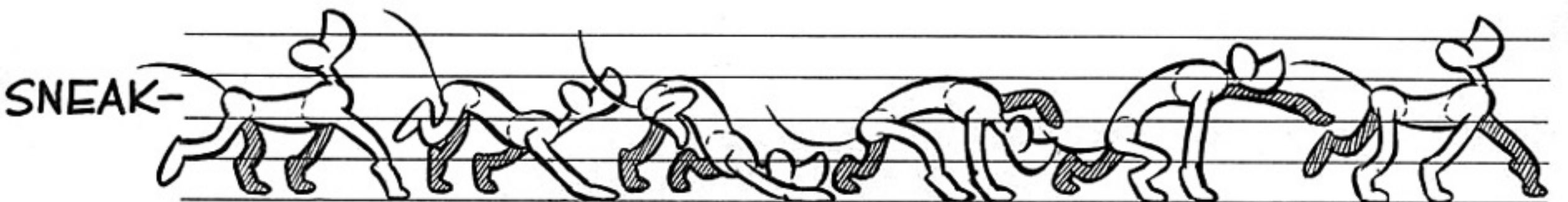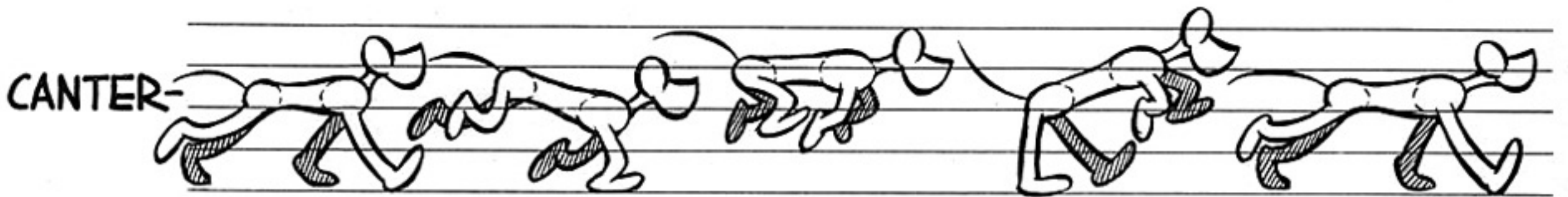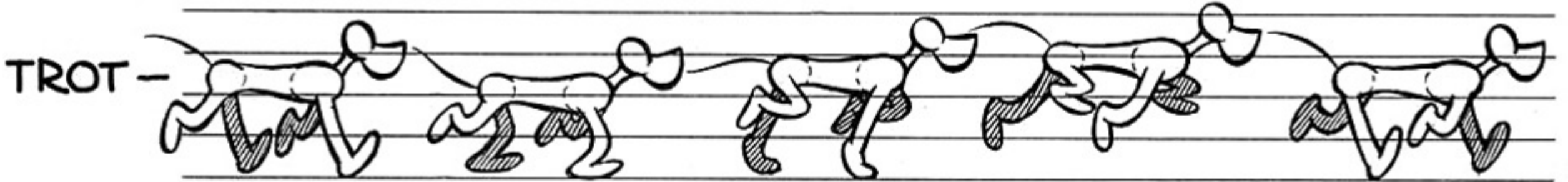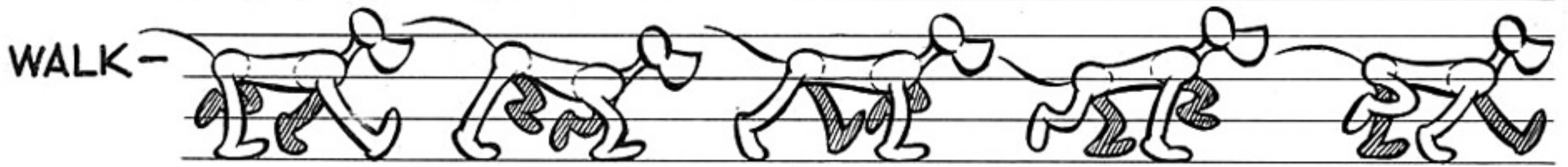
DIFFERENCE BETWEEN WALK & RUN

(A) WALK   (B) RUN   (C) FAST 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.

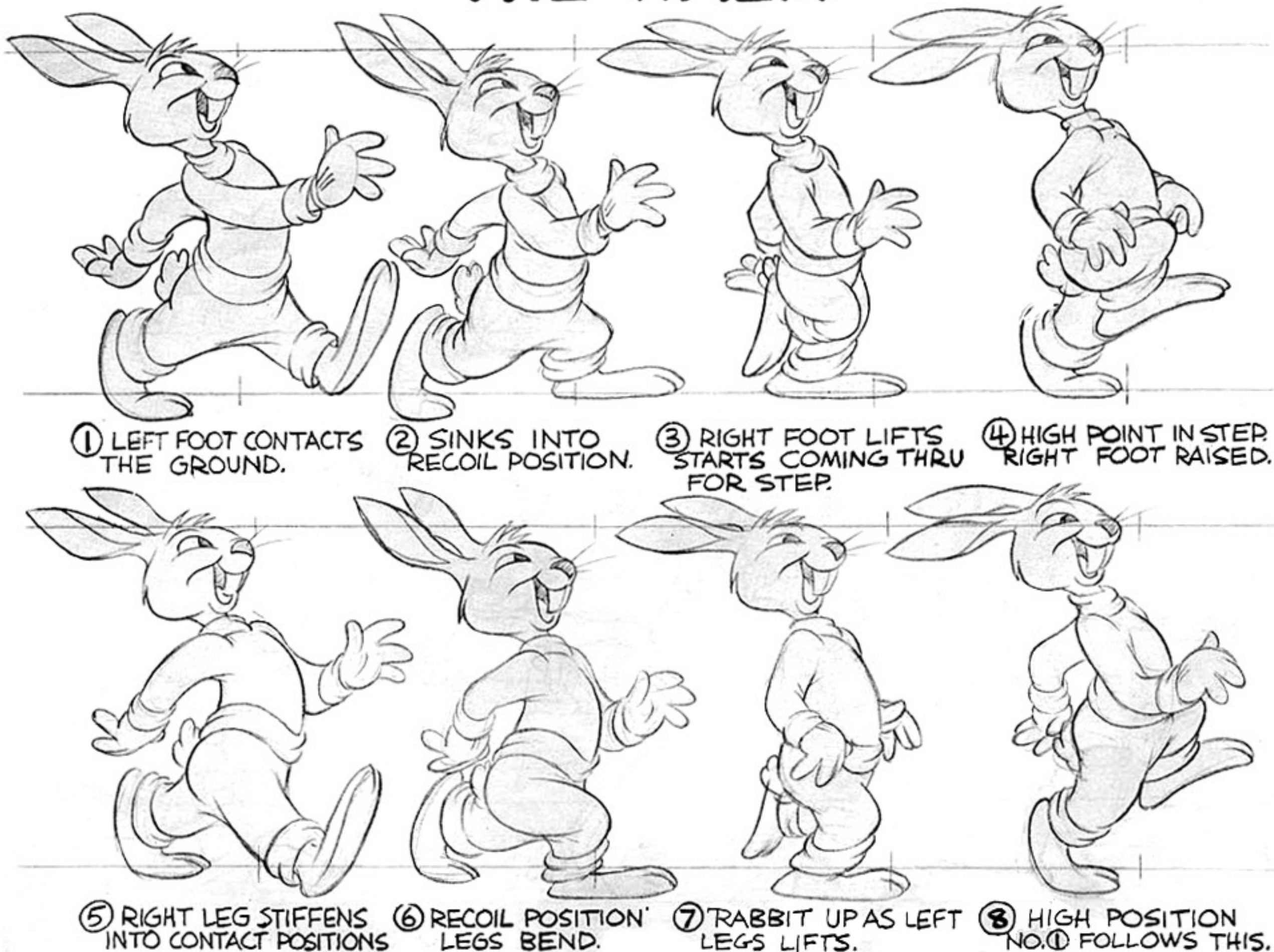The position of the back foot on the contact drawing determines the speed more than any other single factor. Notice on (A) the back foot is down still contacting the ground. On (B) the back foot has left the ground. On (C) the position of the back foot is still higher.

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 WALK

① LEFT FOOT CONTACTS THE GROUND.

② SINKS INTO RECOIL POSITION.

③ RIGHT FOOT LIFTS STARTS COMING THRU FOR STEP.

④ HIGH POINT IN STEP. RIGHT FOOT RAISED.

⑤ RIGHT LEG STIFFENS INTO CONTACT POSITIONS

⑥ RECOIL POSITION LEGS BEND.

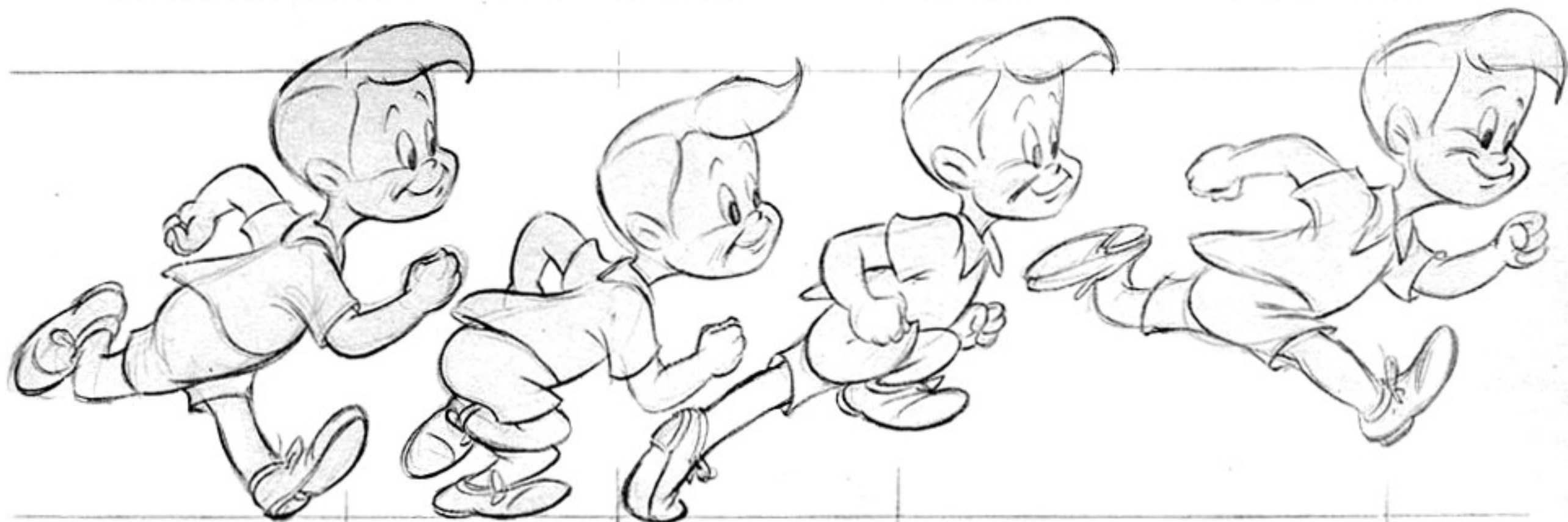⑦ RABBIT UP AS LEFT LEGS LIFTS.

⑧ HIGH POSITION NO.① FOLLOWS THIS.

26

THE RUN

① RIGHT FOOT DOWN IN CONTACT POSITION
② RIGHT FOOT TAKES WEIGHT OF BODY
③ RIGHT FOOT PUSHES BODY OFF
④ BODY AT HIGHEST POINT IN RUN

⑤ LEFT FOOT REACHES FOR GROUND
⑥ RECOIL - RIGHT FOOT COMING THROUGH
⑦ LEFT FOOT STRETCHES FOR TAKE-OFF
⑧ ARMS + LEGS STRETCH NO.① FOLLOWS THIS.

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.

① ② ③ ④ ①FOLLOWS④
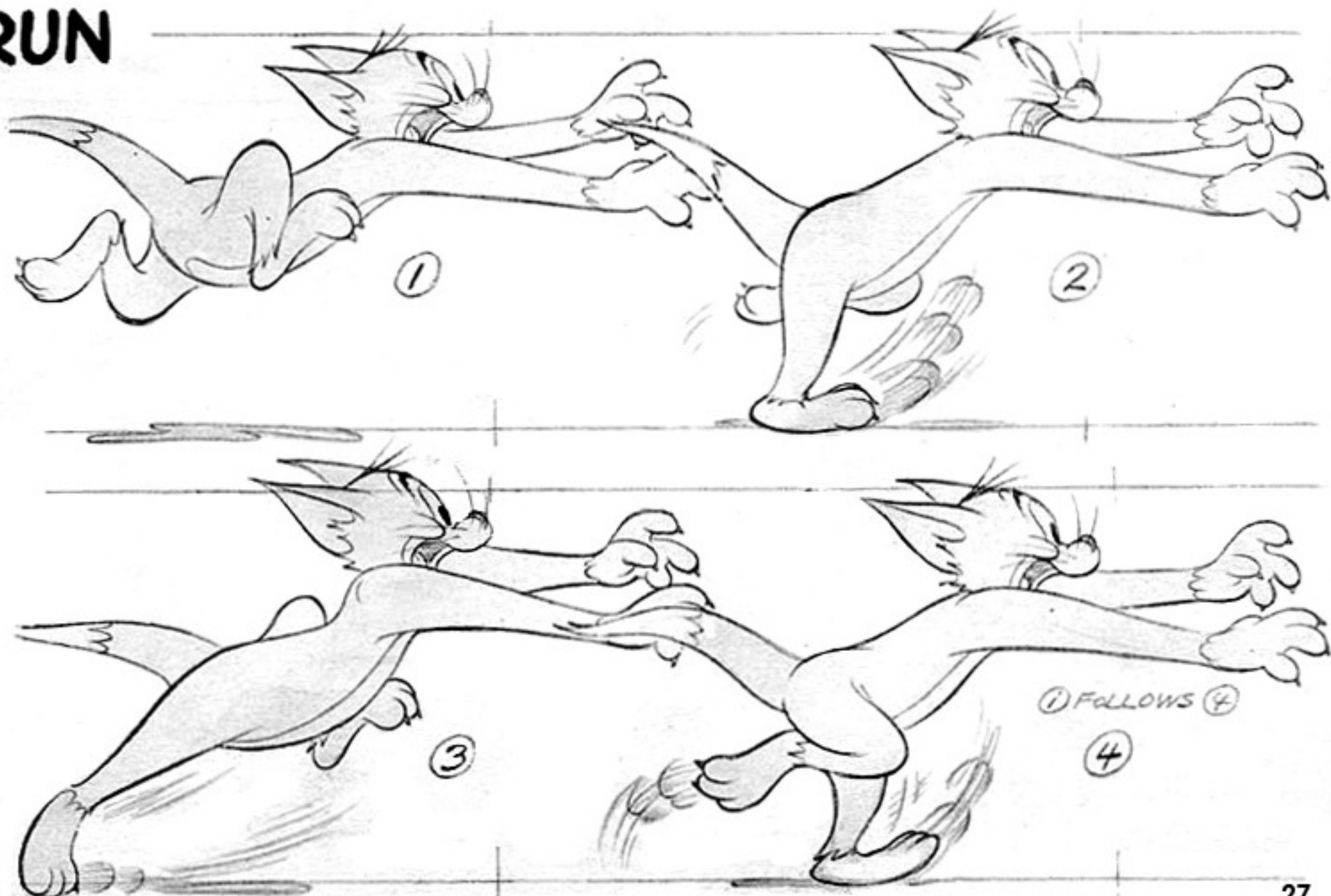
10   13   14   15

24   25   28   30

# THE STRUT

STARTING FROM A POSE ON ①, A STRUT STEP STARTS ON ⑧, ENDS ON ㊱, AND THEN THE CHARACTER GOES INTO ANOTHER POSE ON ㊷ — THE ACTION IS COMPLETE AS IS, AND CAN NOT BE HOOKED UP INTO A CYCLE — THE WALK IS SIMILIAR TO THE STRUT, EXCEPT THE HIGH POINT IN THE ACTION, IN THE STRUT, IS WHEN THE FOOT CONTACTS THE GROUND, AND WHEN THE FOOT IS LIFTED IS THE LOWEST.   IN THE WALK THIS IS REVERSED. — — — I DESIGNED AND ANIMATED THIS CHARACTER "RED HOT RIDING HOOD" IN THE SEVERAL M.G.M. CARTOONS THAT SHE HAS APPEARED, CO-STARRED WITH "THE HOLLYWOOD WOLF" (SEE THE PAGE ON "TAKES").— MISSING NUMBERS IN THIS ACTION ARE IN-BETWEENS. SOME ARE UNEVENLY SPACED. WHEN AN IN-BETWEEN IS UNEVENLY SPACED A CHART IS MADE ON AN "EXTREME" (DRAWING), NEXT TO IT, SHOWING THE IN-BETWEENS POSITION. ALL DRAWINGS HERE ARE "EXTREMES." BELOW ARE THE IN-BETWEEN CHARTS THAT WERE PUT ON THEM.

39   42   47

29

THE SKIP

HERE ARE THE EXTREMES OF A 24 DRAWING SKIP CYCLE··
··THE MISSING DRAWINGS ARE "INBETWEENS" (DRAWINGS
SPACED EVENLY BETWEEN THESE DRAWINGS)·· THIS IS WITH
THE EXCEPTION OF 12+24·· NOTICE THE CHARTS EXPLAINING
THE UNEVEN SPACING ON THESE DRAWINGS ·· 12 INSTEAD
OF BEING EVENLY INBETWEEN 11+13 IS 1/3 OF THE WAY··
AND CLOSER TO 11 ·· THE SAME HAPPENS WITH 24 WHICH
IS 1/3 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 ITSELF 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
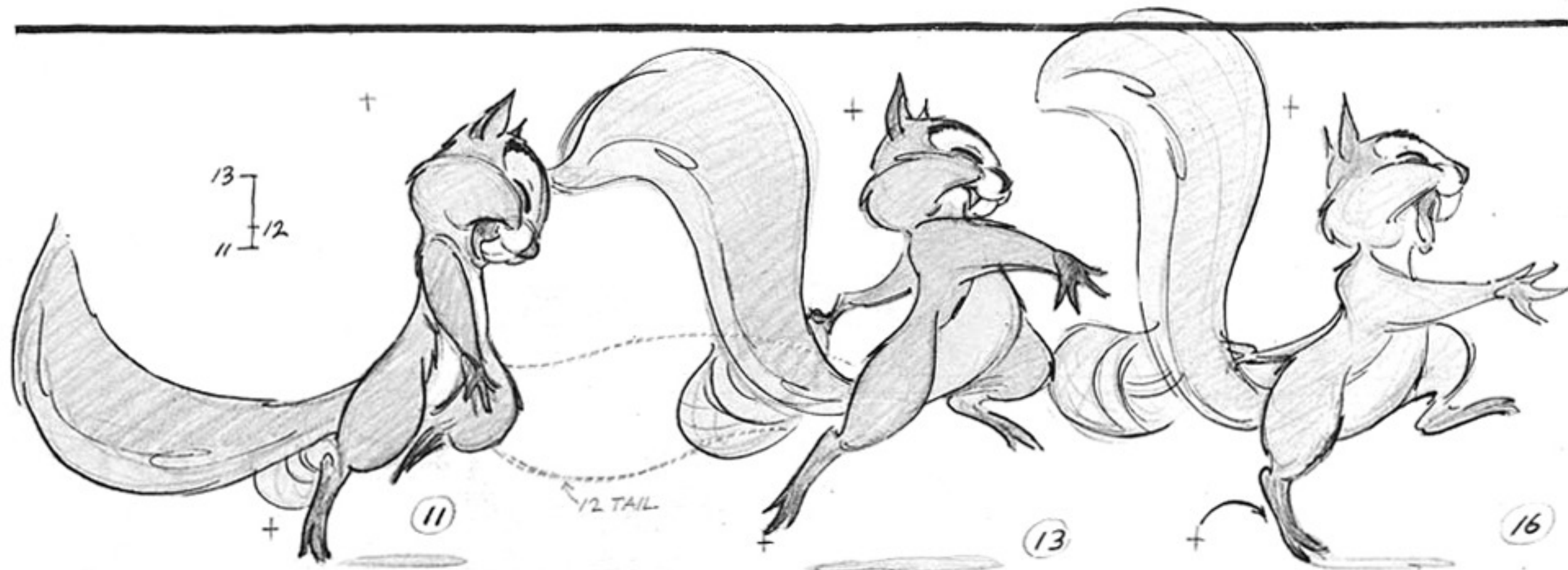
THE SNEAK

THESE ARE THE KEY DRAWINGS IN A 64 DRAWING SNEAK CYCLE.
~MISSING NUMBERS ARE INBETWEENS.--DRAWING ① FOLLOWS ⑥④.
-IN TRACING, BE SURE CROSSES ABOVE + BELOW INDIAN COINCIDE.
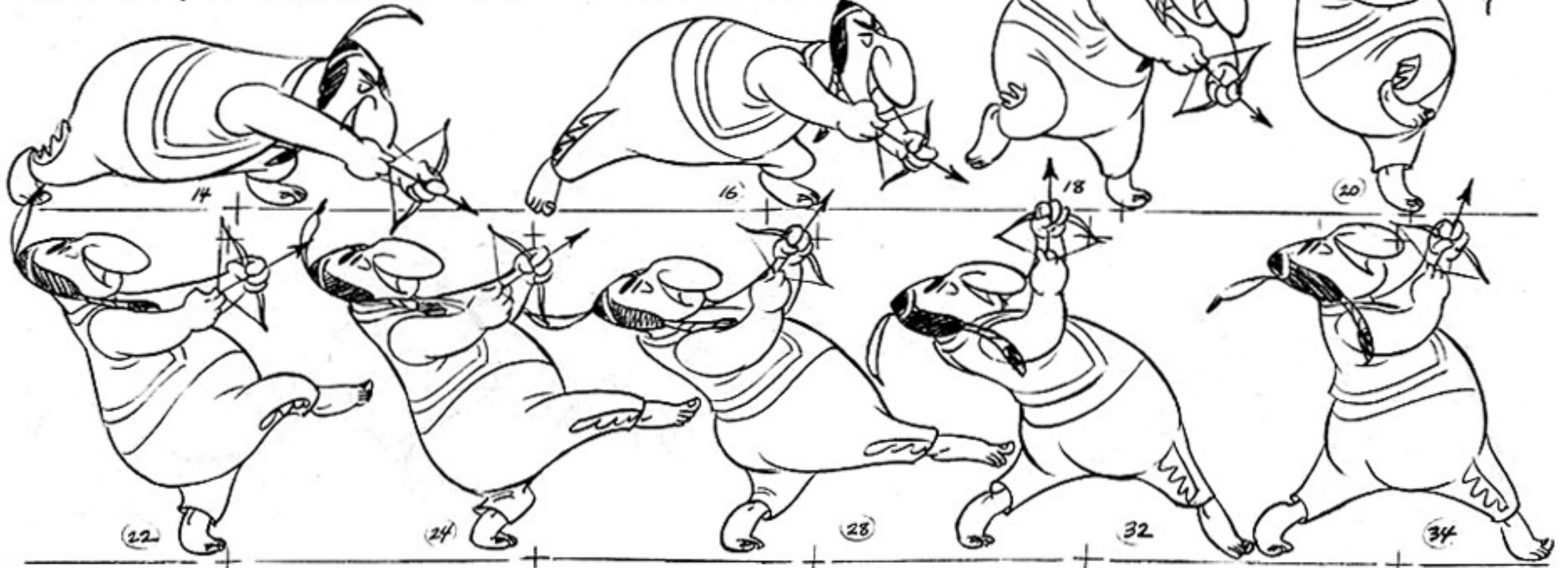
NOT ALL SNEAKS ARE AS VIOLENT AS THIS ONE, BUT
THEY ALL ARE BASED ON THE SAME PRINCIPLE.
THIS IS ALSO A SLOW SNEAK–LESS IN-BETWEENS WILL SPEED IT UP.
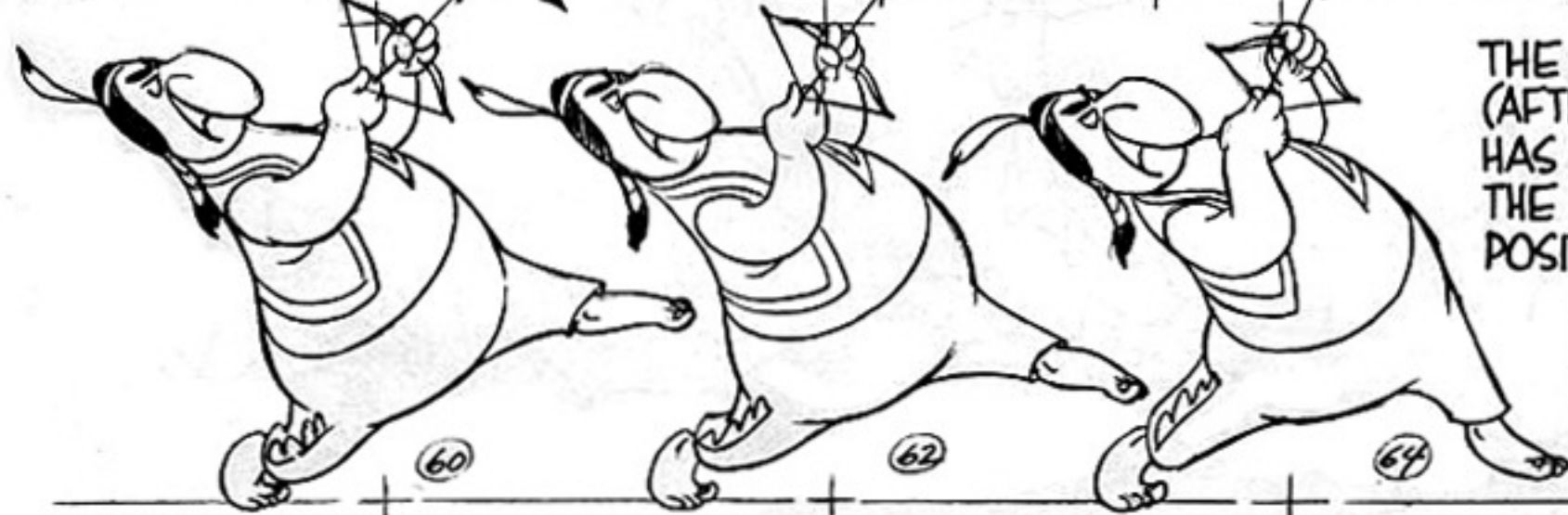
THE SNEAK IS A WALK IN WHICH THE RECOIL
(AFTER THE FOOT CONTACTS THE GROUND)
HAS BEEN EXAGGERATED AND THE SPEED
THE FOOT COMES DOWN INTO THE CONTACT
POSITION SLOWED UP --THIS GIVES THE
ILLUSION OF STEALTH -- THAT THE
FEET ARE CAREFULLY PUT DOWN TO
EVADE NOISE AND DETECTION

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

OVERLAPPING ACTION—Here is a rule that holds in the majority of animation actions: "In animating a character from one point to another, don't go there all at the same time." By this I mean the main action can be preceeded and followed by lesser actions that all relate or are the result of the main action. These are known as "Overlapping Actions" and the proper use of them will greatly improve the quality of your work. Notice from an anticipation on 8 this 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 the cop's stomach. Down on 10 it recoils up like rubber on 13 to 16, bounces back on 18 and then finally settles back up on 24. In other words a main action 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 overlapping 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 it's progress is arrested it will squash 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, coats, etc. In a strict sense, any object that gives in animation has a certain amount of follow thru action.

If you trace this character, remember crosses above and below each drawing are a fixed point on the screen so be sure they coincide.

33

A "TAKE" REGISTERS A CHARACTERS SUDDEN SURPRISE IN A CARTOON.
-- THE AVERAGE CARTOON IS FULL OF THESE -- SOME ARE SUBDUED TAKES.
OTHERS ARE VIOLENT LIKE THE ONES ON THIS PAGE. -- THE TAKE IS NEARLY
ALWAYS **PRECEEDED** BY A GOOD ANTICIPATION DRAWING - LIKE Ⓑ BELOW.
-- THIS METHOD OF GOING INTO THE TAKE
GIVES IT A SOCK. -- BELOW M.G.M.'S
HOLLYWOOD WOLF Ⓐ SEES UGLY DAME
Ⓑ WOLF SCRINGES INTO ANTICIPATION
Ⓒ FLIES UP INTO WILD TAKE.

THE CARTOON "TAKE"

ALMOST ANYTHING CAN
HAPPEN IN A TAKE -- THE
CHARACTER MAY STAG-
GER - FLY THRU THE AIR -
ETC. AT LEFT CONVICT
WOLF "TAKES" AT HIS
PURSUER SGT McPOODLE
OF THE MOUNTIES. --

34

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.

THE VOWELS

A AND I

E

O

U

THE CONSONANTS

C D G K N R S TH Y AND Z

W AND Q

M B AND P

L (SOMETIMES LIKE D OR TH)

F AND V
(SOMETIMES LIKE D OR TH)

NOW BELOW TO HELP YOU GET STARTED – I'VE COMBINED A FEW MOUTH POSITIONS TO MAKE WORDS
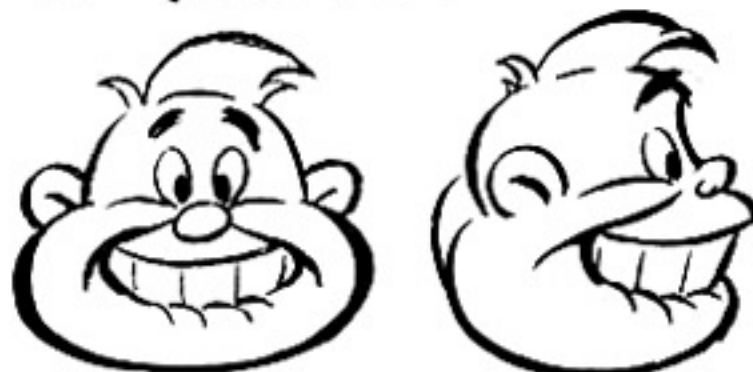
HELLO

PETE

FINE

DAY

ISN'T

IT

HOW

ARE

YOU?

ANOTHER THING TO REMEMBER IN DIALOGUE :– WHEN ANIMATING A GROUP OF WORDS, STUDY THE WAY THE WORDS MIGHT BE QUICKLY SPOKEN TOGETHER ·· IT'S BETTER TO FOLLOW THIS OVER-ALL MOUTH PATTERN, AND HOLD DOWN OR MODIFY INDIVIDUAL SYLLABLES NOT IMPORTANT TO THE WHOLE.

Here are the cleaned up "key" drawings from a Scene I animated in a M.G.M. cartoon to give you some ideas how dialogue can be animated. Missing numbers are inbetween drawings put in by assistant artists. First drawing is a twelve drawing "hold." The scene is a baseball grandstand. This little heckler is yelling, "Kill de Umpire—get 'im out o' dere—kill de Umpire—kill de Ump." At this time an offstage shot signifies the umpires execution. Heckler goes into a surprise "take." Then he rises, removes his derby, and sadly watches the dead official carried off—as a trumpet plays "taps."

LOOKS ANGRY — COMES DOWN INTO ANTICIPATION — THEN SAYS : "K ———— I ———— LL"
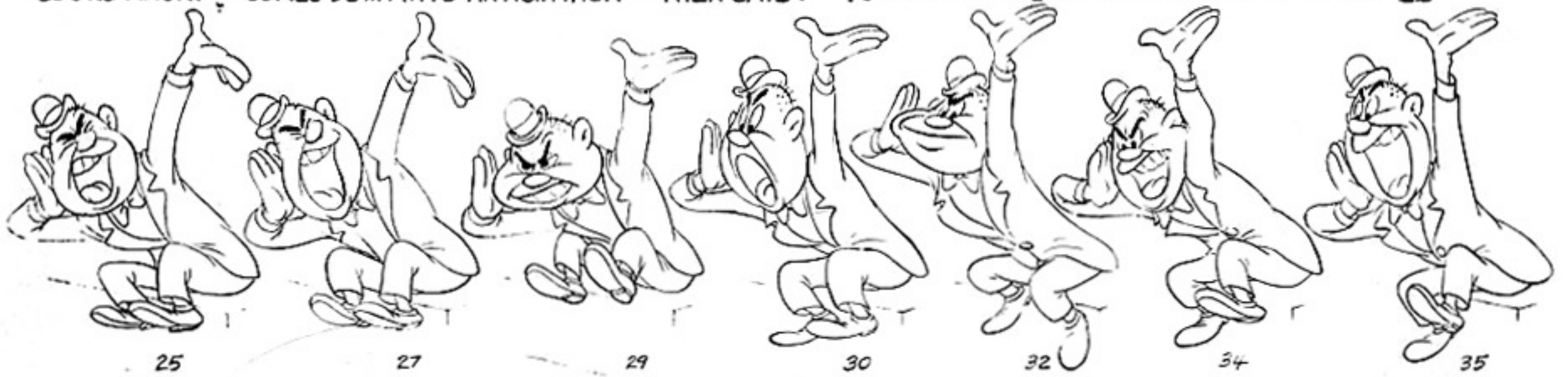
"DE ——————— EE"   "U ——— MP ——— I ———
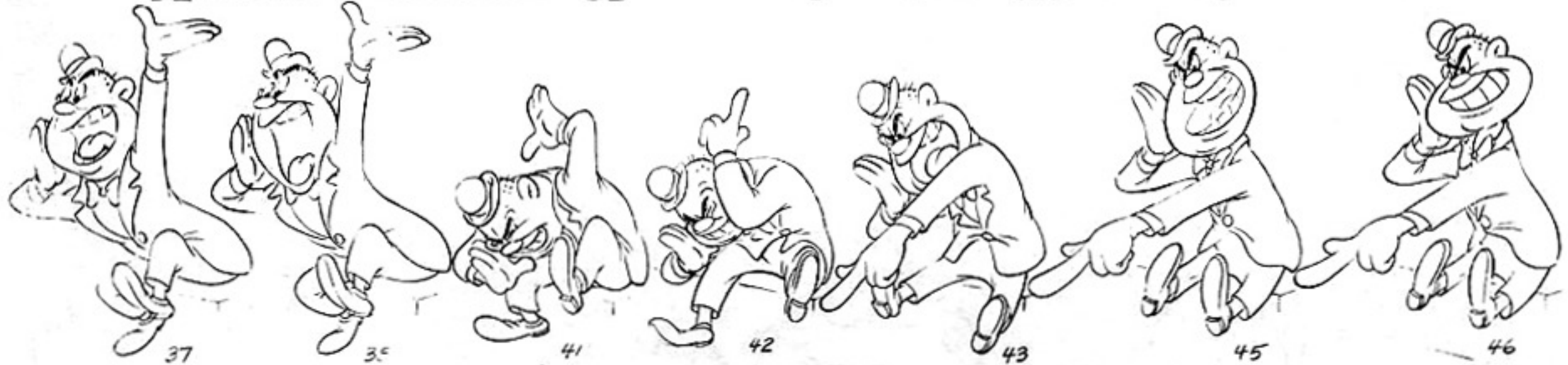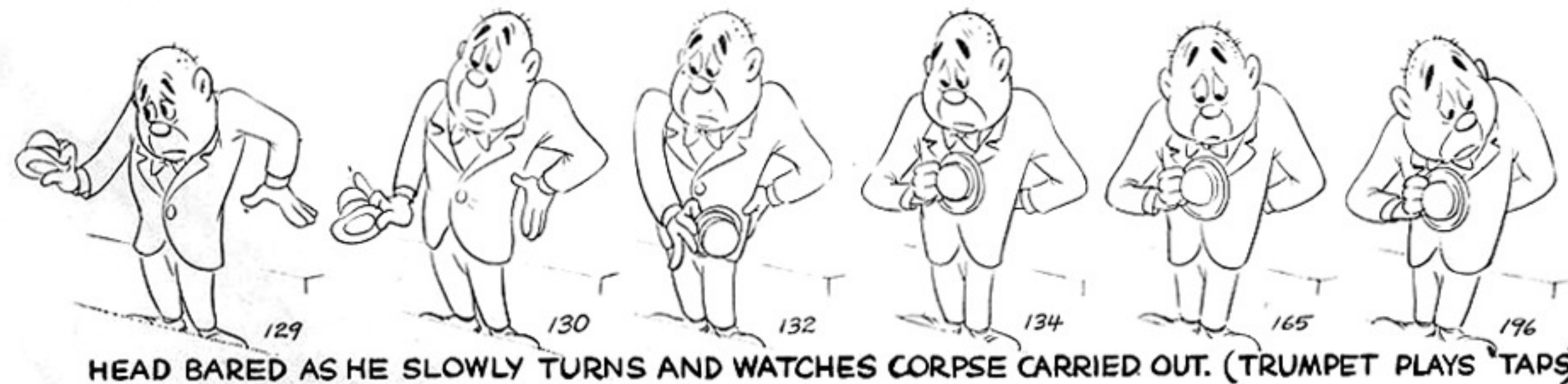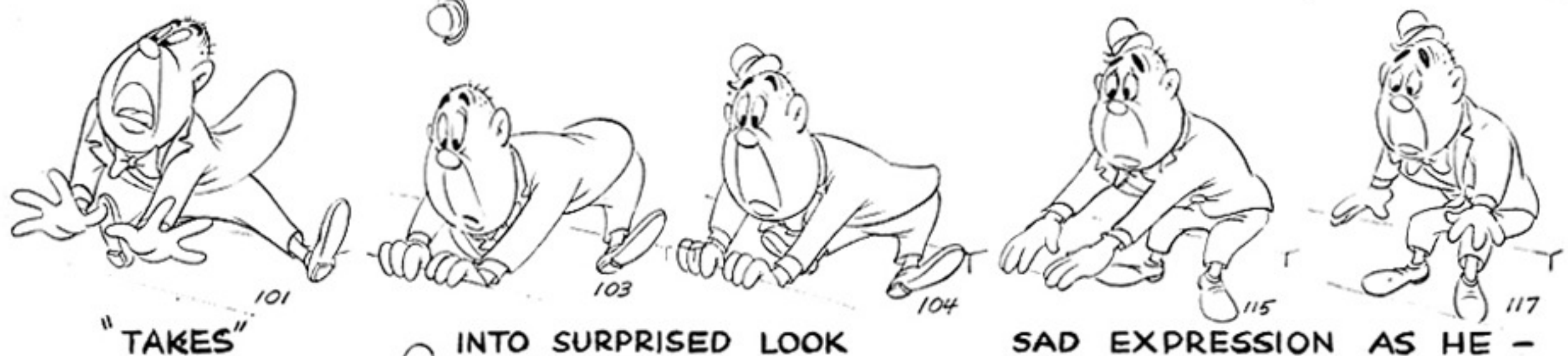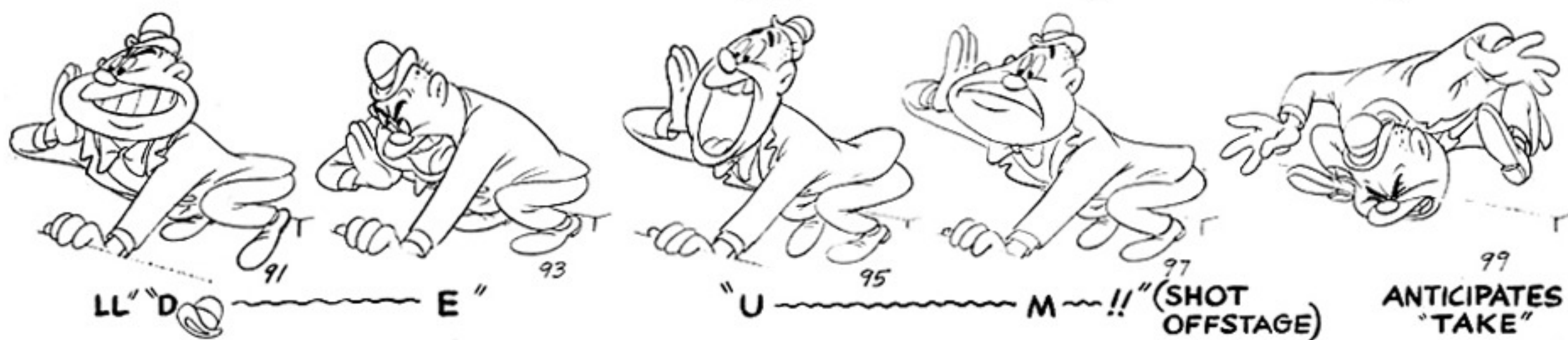
——— Y ——— UH"   "G ——— E ——————— T"H

——— I ——————— M"   "O ——————— UT"   "A"   "DH—

36   ———— E ——————— RE"   ———— "K ——————— I ———
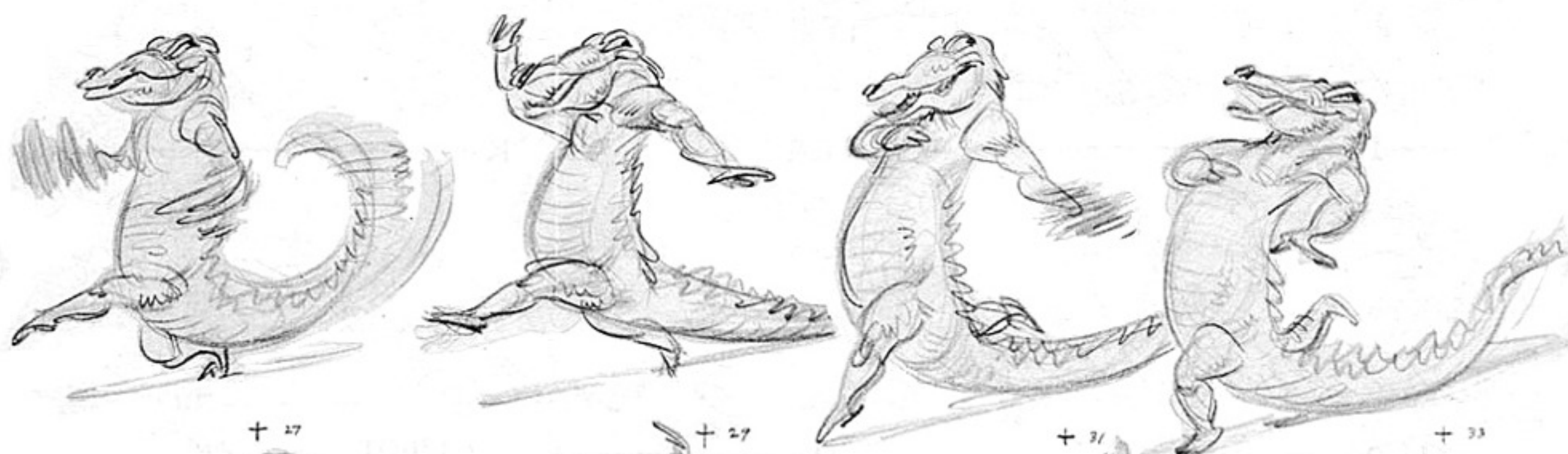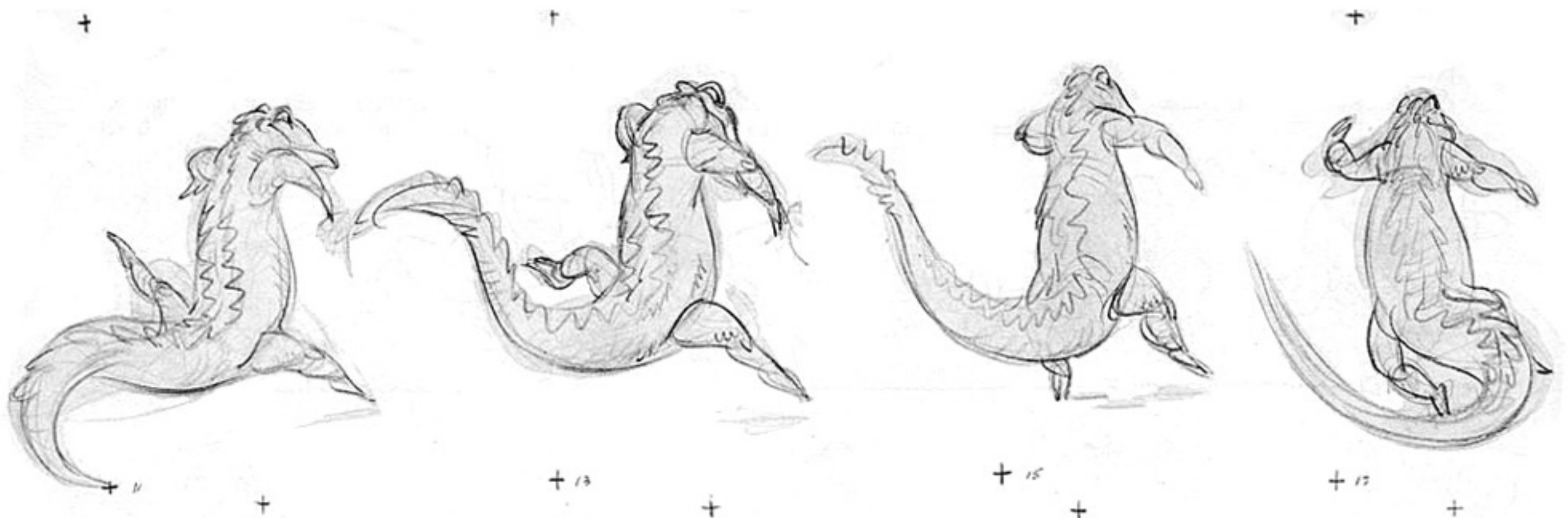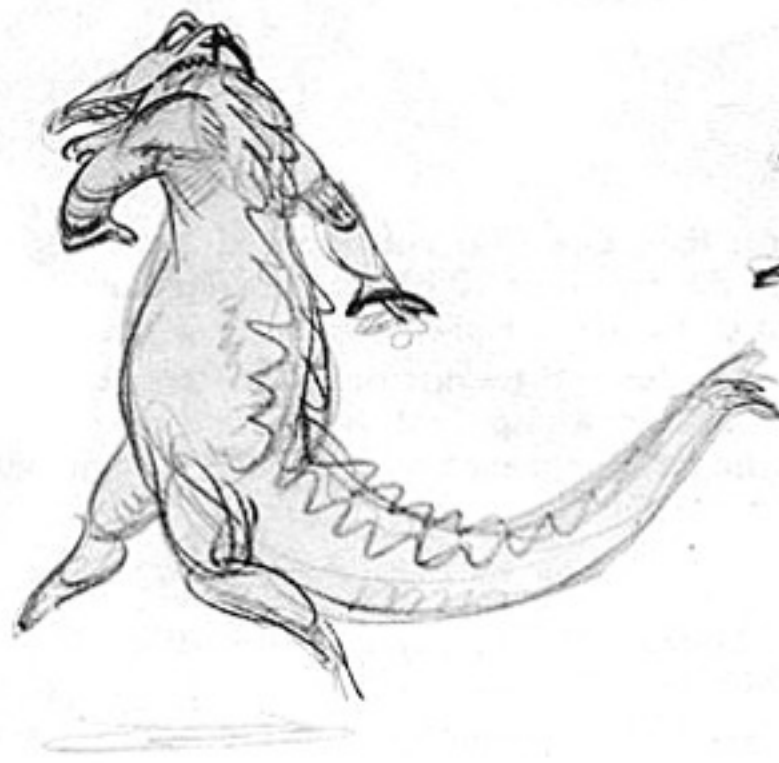
Look over this action and study the animation points I have previously outlined as: Squash and stretch on heads, overlapping action, follow thru, the use of the anticipation drawing, and the dialogue vowels and consonants from page 35 — also notice the general phrasing of the dialogue here. How the heckler assumes a general position for a whole sentence—then changes to another position for the next sentence—instead of changing positions on every word.

—LL"D — 71   E — 73   " — 74   "U — 76   MP — 78

I — 80   RE" — 82 — 85   "K — 87   I — 88

LL"D — 91   E" — 93   "U — 95   M—!!" (SHOT OFFSTAGE) — 97 — 99   ANTICIPATES "TAKE"

"TAKES" — 101   INTO SURPRISED LOOK — 103 — 104   SAD EXPRESSION AS HE — 115 — 117

STANDS UP — 118 — 121   REACHES FOR HAT — 124 — 126 — 127

HEAD BARED AS HE SLOWLY TURNS AND WATCHES CORPSE CARRIED OUT. (TRUMPET PLAYS "TAPS") — 129 — 130 — 132 — 134 — 165 — 196   37