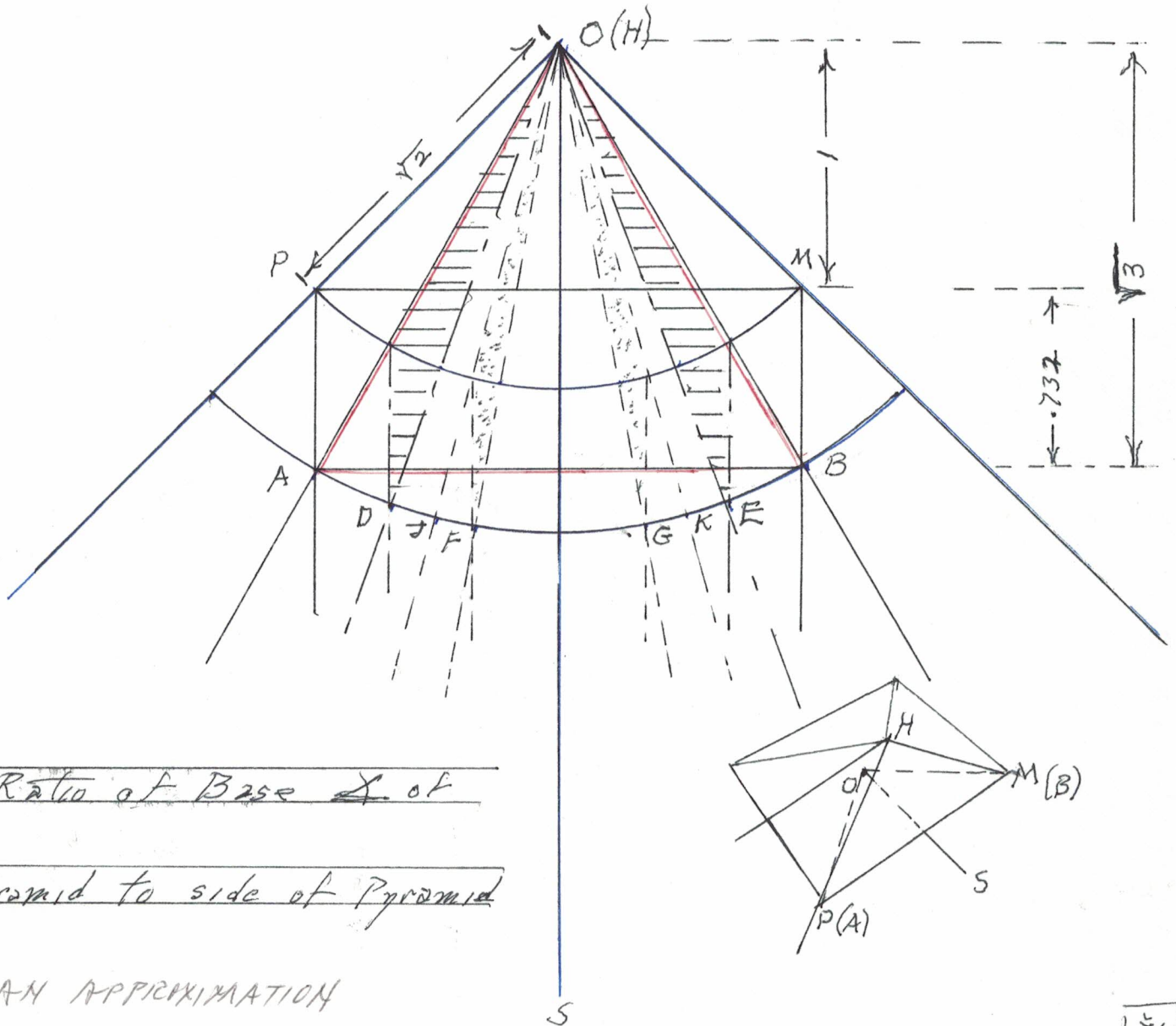


The Pyramid Solution: Trisection of an Angle

with Straight Edge and Compass. Three Examples

$\angle POM(98^\circ \rightarrow 60^\circ)$ $\angle AOB(68^\circ \rightarrow 40^\circ)$ $\angle DOK(30^\circ \rightarrow 20^\circ)$



Ratio of Base of
Pyramid to side of Pyramid

AN APPROXIMATION

永
生

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Robert Reiff

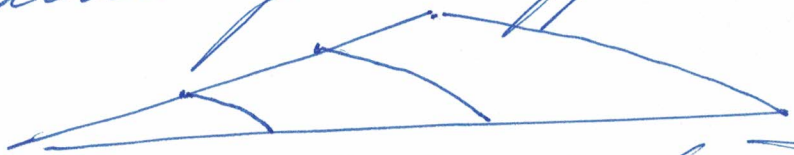
FIG. IV - SAME SOLUTION AS FIG. III BUT TRANSPOSED

INSERT

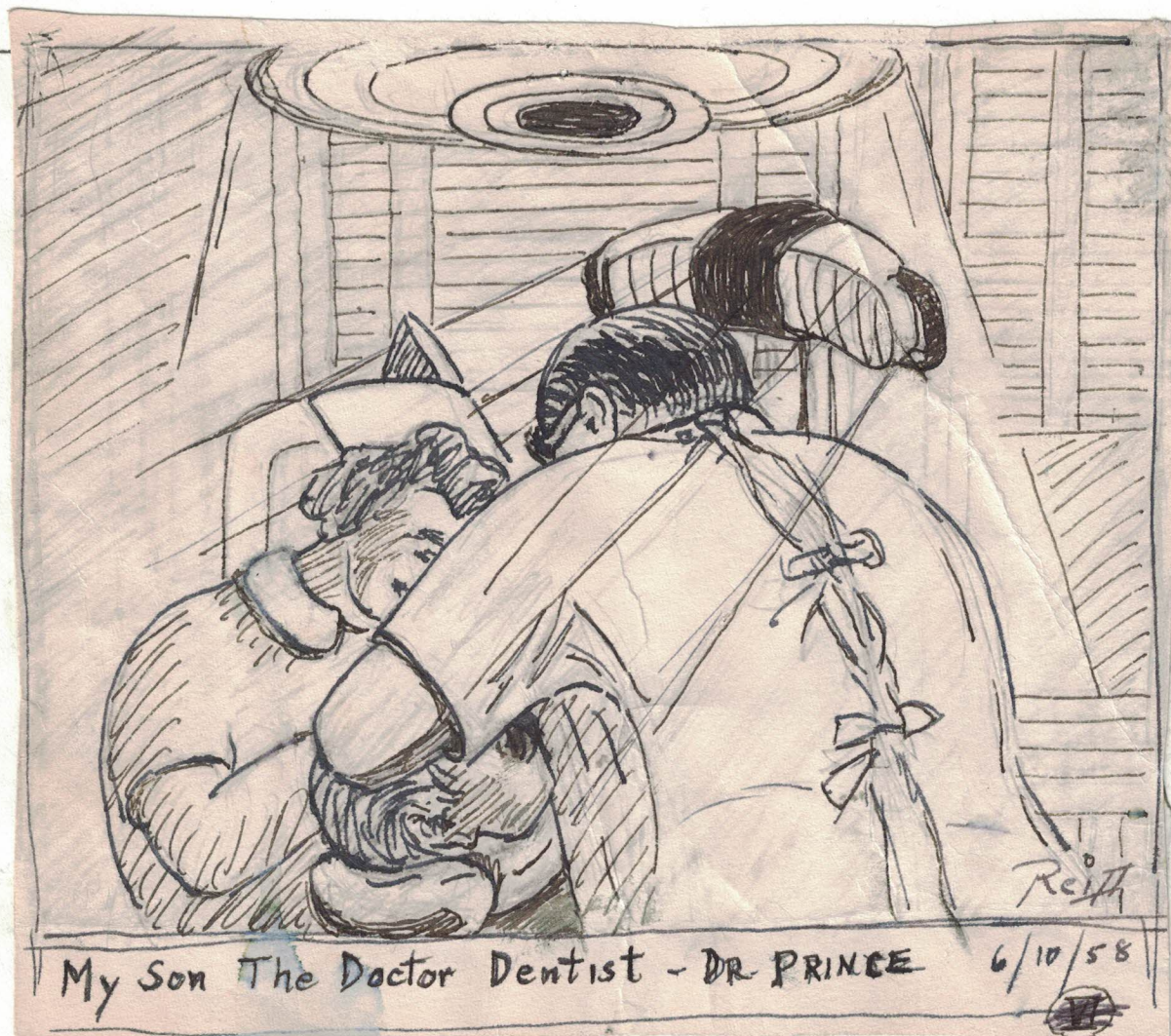
I had to tough out my own conceit
when I found out that my complicated
operations in solving the trisection problem
boiled down to the old problem of
dividing a line in three equal parts using
parallel lines.



Except that in my solution I was using
~~curved~~ arcs of circles of two different
diameters.



The 9' error in my solution is due to
the differences in curvature. Thus, my
complicated solution in Fig 1 may
still be my best answer.



ILLUS ~~III~~ IV

~~15~~ 15

Chapter III

The World Within as Viewed by the Artist.

as I loved the outdoor life
My first love was to become a forester, but my parents wouldn't let me leave home. As a result, I worked as an artist and became involved in a fantastic visual world. In 1929, year of the great depression, ~~when~~ men jumped out the window to save their families from financial ruin via life insurance ~~and no need to repay personal debts.~~ You couldn't get a job unless you had a relative who would hire you.

I went to Cooper Union art school at night and my visual world began to affect me so much that I ^{psychologists} dreamt all night long. Finally, by asserting my will power, I ^{contrary to ~~many~~ statements that this is impossible} eliminated my dreams (at least from a conscious subconscious level). The painting or drawing of Van Gogh's that I like the most is the one called "contemplating eternity (or oblivion?)", ^{black and white} a sketch of an old man in a ~~rocking~~ chair. Talking about a painting, helps it come alive. If I had stayed in the field of art, I would have gone into colored motion pictures because of the fact that ~~the~~ "living art" can reach the emotions better than "still life."

There are a few of my works that I enjoy in additions to the portraits that I have painted. One is the sunlight shining through my closed eyelids that I gave to my friend. Another is the one showing the view of the rest of my visible body as I gaze out from the prison of my skull. Lastly there was the blue nude that had red hair and looked like a pizza pie and was my first painting sold.

15 ~~33~~ ~~33~~

Being an artist was great. You could be temperamental and no one

Also, it was a good way to meet people as
could complain. I sketched continually on buses, on trains, in

class and other places. Where did you get the talent, was a constant question. Ninety percent perspiration and ^{ten} percent inspiration was

the answer. I'd get so involved at times, that I would forget to eat or sleep. I had a good eye for color and learned the secondary and ^(formed by combining the primary colors) tertiary colors on the color wheel (tertiary: citron, olive and russet)

(formed by combining the secondary colors)

The thought of spending my whole life painting bothered me and when I read Robert Browning's "In a Balcony" there was a phrase "let Rubens there paint us, we want to live the things he paints" that helped me break away from painting. Also the concept of a "starving artist" didn't appeal to me. So, on to college and dental school. ~~(1915-1917)~~

N-INSERT

CCNY was tuition free in those days except for books, lab fees, transportation and food. You ate lunch standing up at crowded tables. There were no women and the "thrones" had no privacy and no dividing walls. Anything official required standing on long lines for hours. Recreational facilities, outside of gym or sports were nil.

After lunch, we would gather in the "alcoves" to talk.

all through college I kept my spirits up by naming SUITE L'IMPERIALE BY BOZET AND showing the words I wrote for it, to myself "ON I GO, ON WHERE--"

N Insert

About 1937 Al Baxter, one of the staff artists, and I drove out to Roosevelt Field in his car to see the return of Sir Hubert Wilkens from his voyage ^{attempt} to the ^{reach} ~~North~~ Pole under the polar ice cap which he never quite reached

While at Columbia, School of Dental & Oral Surgery


A friend and I went to a German propaganda film in Yorktown (part of Manhattan) in which the German Air Force was portrayed as invincible by Goering. A group of us, at graduation time, went to a German Brauhaus and sang some French and U.S. songs in response to some German songs. Most of ~~the~~ Dental School was hard work and long hours with little time for socializing. I fell in love with one or two of the dental hygiene students. With the first one, I was rebuffed ^{after} when I was invited to dinner and failed to come up to her parents standards. I was just as content, as I didn't want to impose her congenitally missing teeth on any future offsprings. The second one, I still have a yen for but there was a religious difference plus a deep south difference and learning the doxology was not sufficient.


The ADPhi Omega dental fraternity, which I joined for one year, had all the old exams but I wasn't too keen on segregation by religion and, also, in my last year I was short on funds. In fact, I had to use up the \$275 dollars I had saved in a years work for tuition which really hurt. I sketched all the Professors, made ^{some volunteer} didactic drawings for Dr. Omans and drew a few covers for the School Journal (Illus # IV).

The
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Reiss 

PLUS # 

SDOS - COLUMBIA UNIVERSITY

~~CHAPTER IV~~ 17A
The War Years

When I started college in ~~1938~~ 1932 the prospect of war was already in the offing. Volunteers were going to Spain in the Lincoln brigade, protesters were protesting ROTC and American Firsters were getting publicity. By the time I reached Dental School things were beginning to come to a head. ~~People made~~ People made fortunes selling scrap steel to Japan. ~~Our economic squeeze~~ ^{program of} on Japan and our lend lease were ^{caused by} ~~includes~~ ^{PLACE INSERT} the coming war. At 25 years of age, I was tired of living alone and as I now had my dental license and an assured way of making a living, I began to look for a wife. By Dec 41 I was married and had been accepted as an Officer in the AUS.

Several ships had already been sunk sailing out of New Orleans. Go to any night club and you could find out who was leaving when for where. We stayed at Jackson barracks after a tour at Camp Lee and Camp Pickett. I drilled medical officers and gave lectures to enlisted personnel on first aid. ^{was the motto over the barracks door.} On the ball or on the boat, ^{I made the drawings for our companies sidewalks at Camp Pickett and gave construction advice.} We left New Orleans for destination unknown. Those before us went

to North Africa, those after us to the South Pacific. We landed in Panama. ^{On} the trip down, we saw flying fish, phosphorescence on the surface of the water that was as blue as ink, and porpoises. I kept busy sketching and playing the harmonica. We passed through torpedo junction near Cuba. We reached Panama at nighttime and

My tours of duty took me to Albrook Field, France Field, Gulick and Rio Hato. While at France Field, I was in the middle of removing an impacted molar when we had an alert. A German sub was firing at the oil refineries at in Venezuela (Aruba to be exact). ^{Travelled} ~~by train~~ across the ^{1st mcs} ~~canal at night~~ in an old train that still had kerosene lanterns hanging from the ceiling.

There were a few tragic war stories that I heard

~~Insert~~

a soldier,

I heard a story of a plane being refueled and the gasoline attendant, catching on fire with his arms spread out like a cross. Another was about the bombing on Kiska from the Aleutian island of Attu at night - the men in this one group, came off the landing barge and kept walking and ~~in the water~~ walking in the water and couldn't find land. They were walking up a river - fortunately, the Japanese had already pulled out.

Another story I heard was that of a scared pilot on D day dropping men to certain death in the water before he reached the black area and turning back. What was truth and what was fiction is hard to say.

~~Insert~~ INSERT "This last story ---

~~There~~ this last story had one happy part.

There was a ~~story of~~ ^{the} sergeant in tail of plane that exploded and tail came down safely spinning like the seed pod from a maple tree.

~~we~~ we took a small contingent of troops down the southern coast of Panama as far as the road went. Then we got out of the jeeps and hiked until we reached Bayano. There, the MD with us, treated some of the natives who had malaria with quinine or that other drug which imparts a yellow color to the skin with constant use, _____. We slept in our jungle hammocks. I didn't know how to string mine up and sleep with the netting collapsed over me. (Illus # W). There were fires in the brush a mile away that looked as if they had started by spontaneous combustion. While we were there, one of the fires reached the village and the natives were busy pouring water on the thatched roofs. Hiking back we had to shield our faces from the heat of the blazing brush. I tested my forty five in the woods and, even with two hands, I couldn't

Insert.

I still/cant get over my amazement at finding that bananas grew upside down, although there is no criterion for ~~spring~~ which is upside and which is down.

My friend and I went to a German
propaganda film in Yorktown (a part of Mountbatten)
in which the German air force was portrayed
as a more able group of us, at graduation
I went to a German Breakfast and
saw French and US says - that off
Dental School was hard work and long hours
with very little time for socializing - I fell
in love with one of the Dental hygiene
students. ^{with} The first one I dated, in part on
when I invited to dinner but I wasn't sure it
because I didn't want to marry a congenitally
missing teeth on my children; the second one
I still have a yen for. But there was a
a religious difference and learning the dialogue
was not sufficient -
The Dental fraternity had all the
of I even I wasn't too keen on segregation
by religion and also in my last year I was short
on funds and had to use up the 275 I had saved
on my job for tuition, which really hurt. I sketched
all the professors made dramatic drawings and Dr. Bowl Omer
all 2 new covers for the school year (1445 #10)



~~MATER PARRISH, DR. YANK~~
~~AND JENNET HANCOCK~~
BAYANO

ILLOS # ~~VII~~

~~Insert~~

Strag ~~ball~~ bottom trousers coats of navy blue
He'll climb the rigging like his father used to do.
~~It's~~ It's a girl why bounce her on your knee
If it's a boy sent the fellow off to sea

~~Insert~~

money used which had holes in the middle (possibly old Chinese coins).
Although there is now an excellent drug for treatment it seems that the means
of transmission is still not known. I associate it my mind
with dampness.

One weekend, we

with machine ~~the~~

~~44~~ Local taxis held about ten to twenty people and were called Chivas. Cars drove on the wrong side of the road, British style.

One day, during the war, the system was changed to the American ^{side} right ~~hand~~ side of the road. It wasn't safe to travel for two weeks.

As a youth I had a habit , after sitting in a movie theatre for two hours
of using up the energy saved by jogging home. One night at Gulick, after
watching a movie,I forgot myself and reverted to this habit. A vague sound
penetrated my mind. Then, the second time I heard it and, the third time, I stopped
dead in my tracks. It was an MP looking for a prowler in the nurses quarters.
Fortunately for me he had been well trained ~~soldier~~

Upon my transfer to Rio Hato, I made the mistake of telling the pilot that it was my first time up (we were in an observation plane), so he decided to give me a thrill and buzz a sail boat on the ocean.

I was ^{doing well} until we reached Rio Hato and, then, when we began to circle the field, I became dizzy because of the ~~low~~ ^{which prevented} cowling ~~I couldn't~~ ^{me from} keep^{ing} my head erect^e. When we landed, I couldn't open the safety belt it was so rusty or stiff..

One day I hiked up toward Penoneme and a horrible sight imbedded itself in my mind's eye. There was a piece of carrion in the field and about fifty buzzards tearing at it, and crowding, so that one or more buzzards were standing on the other buzzards backs. The dry rustle of their wings sounded like - ugh- I can't describe it.

I was in the AUS before there was a separate air force and I was assigned to the Army Air Force.. One night, there was a plane that crashed into the drink on a routine flight. (A week later some

fishermen brought ³ the bloated body in that you could smell a mile away. ^{The skin looked like marble with blue veins and was peeling off.}

Right after ~~one~~ crash, they woke me up about three am. to chart the burned up pilots teeth for identification purposes. He was on his back and the back half of his mouth was full of blood.

Needless to say, I was ^{not} too happy about flying after that.

One week I was put in charge of a group of about twelve men who were being given a weeks vacation (R & R) at El Valle. El Valle turned out to be the Shangri La of Panama. There was no activity in the tiny town except for an open air cantina (^{clit} a block of concrete with colored lights strung around it). The valley was so windy that the mess tent wouldn't stand up and we had to lash it to a tree.

I drank too much ^{cerveza nacional} and had trouble getting back to my pup tent.

On our return ^{to base with the troops} my sergeant and I discovered that we were covered with ticks. They would not back out upon the application of a lit cigarette.



EL VALLE - THE SHANGRI LA OF PANAMA

ILLUS. # XVII