#7 Ben Harrelson
& Miscellaneous
Warbasse=Hi Valley

VII

#28

K & E
REG. U. S. PAT. OFF.

COLLEGE FIELD BOOK
360 C

Grace D. Clark, 16 1N-2E
Padelt & Reservoir 5N-1W

NAME Wm H. Bartlett B.L.
8006 E Culver, Phoenix, Ariz.

18-19

15-16

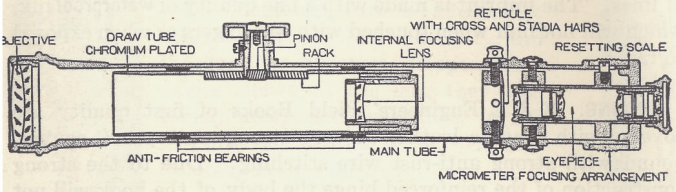
K+E SURVEYING INSTRUMENTS.

The line includes every type of instrument from the Precise Theodolite to the Builders' Level.

K & E Surveying Instruments are in use by the U. S. Coast and Geodetic Survey, the U. S. Geological Survey, the U. S. Engineers, the U. S. Army, the U. S. Navy, the U. S. Forest Service; by most State and Municipal Departments; by Engineers, Surveyors, Architects, Colleges and Schools.

Among the improvements which have created the wide demand for K & E Surveying Instruments, is the **K & E Internal Focusing Telescope** shown below.

The **K & E Internal Focusing Telescope** was first incorporated in K & E instruments in 1925 and is now standard construction on most transits and levels of the better grades.



One of the many advantages of this construction is as follows:

When the conventional type of telescope is focused by the movement of the objective lens, the volume of air in the telescope is changed, since air is pumped in or out of the telescope as the space within is increased or decreased by the change in position of the lens. Dust and moisture present in the air thus find their way into the telescope.

The illustration above plainly shows that the **Internal Focusing Telescope** has a one-piece main tube closed at one end by the objective lens, and at the other by the eyepiece. Focusing is accomplished by means of the internal lens, the movement of which does not change the volume of air within the tube, so that this type of telescope can be made practically dust and moisture proof.

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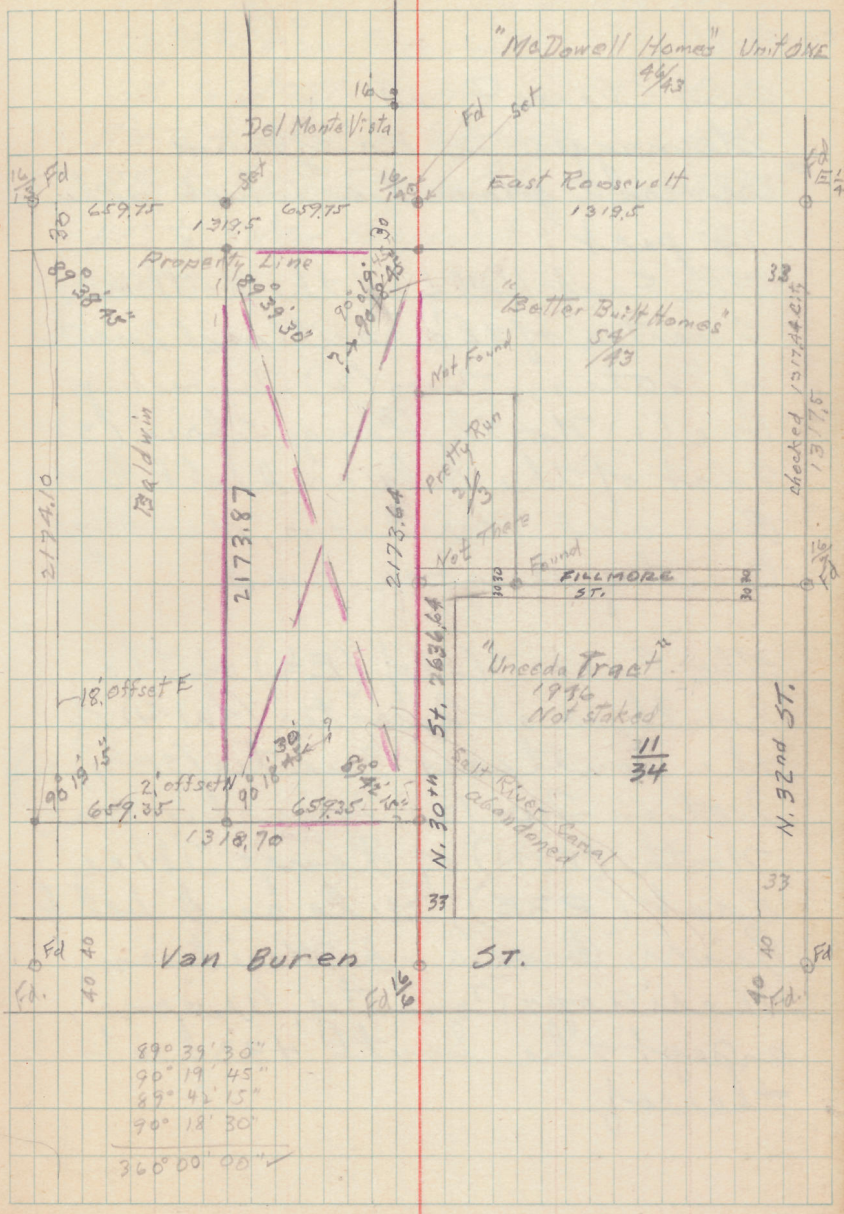
21-21

L L Kriegbaum in SE¼ 2 - 1N - 3E
Nov. 21-22-23 1954
Bart & Smoot

To Survey the E½W½SE¼ Sec 2, except the S 433' and except the N 30'.
Found recently set ½" I.P. at center Sec. 2, learned later that it is approx. .5' too far South, but has been generally accepted.
But stake & pipe at 16/19 was found to be .35 too far N. and .72' too far West
So, we set 1" I.P. at mid pt. & on rt. line between 16/13 and Stone found in hand hole at E¼ cor.
chained 16/13 to E¼ = 2639.0
chained, E¼ to 16/9 cor = 1318.2
chained 16/6 N to 16/4 (corrected) = 2636.64
set ¾" I.P. on E line W½SE¼ at 433' N of 16/6
On 18' offset to E from W line SE¼, set point 433 N. of S¼ cor (NE ∠ in this cor. = 90° 19' 15")
∠ in NW cor at 433' N of 16/6 = 89° 42' 15"
∠ in NE of mid point of 433' Line = 90° 18' 45"
Balancing of ∠s changes: NE ∠ to 90° 19' 45"
and changes NE Mid ∠ on S to 90° 18' 30"

ies	Bearing Length	Latitude N	Latitude S	Departure E	Departure W
to SE	S 0° 1' W 2636.64		2173.64	0	0
to SW	N 89° 42' 15" W 659.35 ?	340			659.34
to NW	N 0° 0' 45" W 2173.87	2173.87			.47
to NE	S 89° 40' 15" E 659.75		3.79	659.74	
		2177.27	2177.43	659.74	659.81
		-.16		-.07	



15-16 18-19 21 20 22

~~569-59~~ (49)
911-350

~~569-59~~ (53)
911-350

t Claim Deed
einegger to Krieglaum
veral properties which include
part:
he East Half of the Northwest
uarter of the Southeast Quarter
Section Two (2) Township
e (1) North, Range Three (3)
st of the Gila and Salt River
se and Meridian, Maricopa
unty, Arizona, and

he East Half (E½) of the
uthwest Quarter (SW¼) of
e Southeast Quarter (SE¼) of
ction Two (2), Township One
orth (T 1N) of Range Three
ast (R 3E), Gila and Salt
iver Base and Meridian,
aricopa County, Arizona,
cept the South 433 feet
ereof

Ties to ~~16~~ 15 cor (NE cor Krieglaum's)

SE to NW cor Sidewalk	65.75
SE to ~~Street~~ Sign	40.50
NW to + Outer Cor Sidewalk	67.40
NE to face Light Pole	33.85
NE to SW cor Housewalk	60.9
WNW to SE " " "	67.55