#7 Ben Harrelson
& Miscellaneous
Warbasse=HiValley

VII

#28

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

COLLEGE FIELD BOOK
360C

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

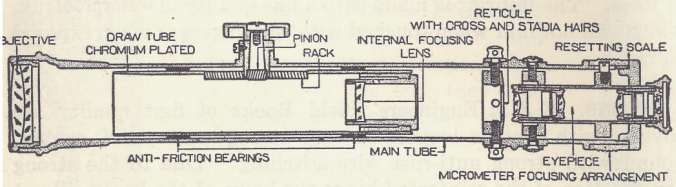
K+E SURVEYING INSTRUMENTS.

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.

INDEX

		Page
Levels on ± 100 Acres	Sec 29 - 4S - 4W	2 - 14
Harrelson, Ben. Survey for ± E½ SW¼	Sec 20 - 4S - 4W	15 - 16
Henry Warbasse, "HIGHVALLEY"	in E½ 12 - 13N. - 3W.	17
L.L. Kriegbaum	in SE¼ 2 - 1N. - 3E.	18-19
Lloyd L. James, et al.	7 - 1N - 4W.	20
Gill	15 - 1N - 3E	21
Francis, Sub, Peoria	23 - 3N - 1E	22
Padelford Reservoir & "80"s	32/33 - 5N - 1W	23-25
Padelford Dam	32/33 - 5N - 1W	26-28
Gutshall	21 - 7S - 4E	27
Grace Clark	16 - 1N - 2E	30
" "	" " "	31

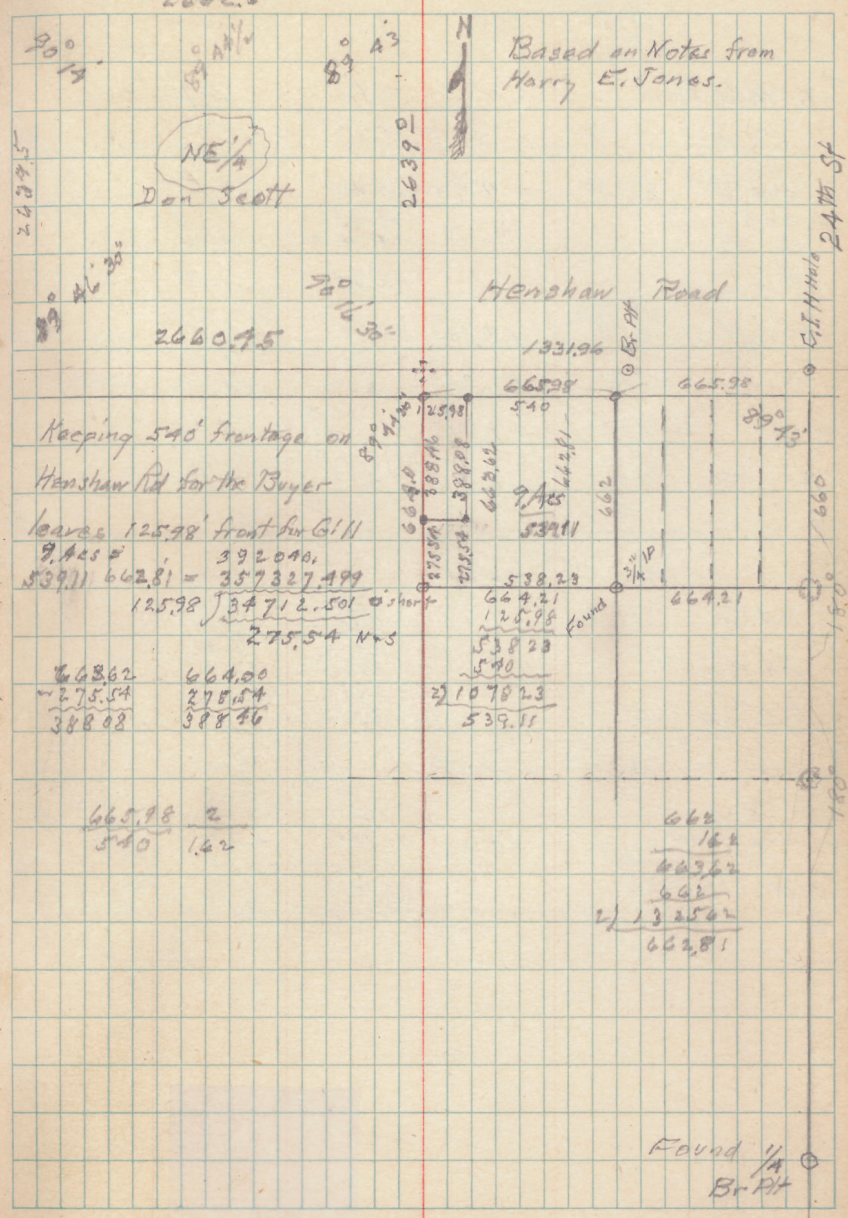
16/35 Bledsoe Tr 3/4/27 (28/29)

or HES Ties	x NE to Pow Pole nail	40.5
e -6"	→ E To N & S Fce	29.7
r. Plate in Pave	→ N Line with " To E	—
- sec 15	→ SE to Pow Pole on N & S Line	59.5
	→ SW to Phone " nail	17.0
	x NW " Pow Pole "	14.3
60 S. of NE cor	E to Cus Tu Line	36.0
e -2"	SE " Pow Pole	55.5
	SW " NE cor Bldg	56.0
	W " SE cor F P	37.0

Turned Left 89°43' from FS on N¼ 15-1N-3E
d chained S. 660. to Black Patch in Pave
en, chained W 664.21 by H.E.J. & Found ¾ I.P. against
t Foot of Old Leaning 6" Round Cor Post.
nd ∴ spikes at 16/1 Location, on N Line NE¼ Sec 15
chained E to NE cor = 1331.96
d Br Plate on N Line NE NE ∴ 672.42 659.54
ned S. from 16/1 cor, 664', also W 664.21 from I.P. at
of Cor Post in center of NE NE, and Found Trace of
ust iron. Set ½" I.P.

I.P. 33' S of 1/64 cor on Mid Pt on N Line NE NE
set Pipe on 33' PL, 540' W of above 1/64th pipe

Survey of 10 Ac for Gill NW NE NE 15-1N-3E



9 Acs = 392040.
539.11 662.81 = 357327.499
125.98) 34712.501 short
275.54 N & S

663.62 − 275.54 = 388.08
664.00 − 275.54 = 388.46

665.98 / 540 = 2 / 1.62

662 × 162 = 663.62
662
2) 1325.62
662.81

18-19 21 23 22