25

Form 85
Sheet No. 1
(Revised July 1, 1914.)

U. S. DEPARTMENT OF AGRICULTURE

FOREST SERVICE

OCT.-2 1915

FIELD NOTES

OF

HOMESTEAD ENTRY SURVEY NO. 402

SITUATED IN THE TONTO NATIONAL FOREST

ADMINISTRATIVE DISTRICT NO. 3

In Section 22, unsurveyed, Township 11½ N. Range 8 E.

" 27 " " " " " " "

(See 22)

of the

Gila and Salt River Base and Meridian.

State of

ARIZONA

Applicant for listing Robert Peach,

Residence Pine, Arizona

Application No. 391, dated February 24, 1913

List No. 3-3001, dated December 31, 1913

Applicant for survey Robert Peach,

Residence Pine, Arizona

H. E. No. 025227, dated June 3, 1914

Office

~~Land District~~ Phoenix, Arizona

Survey executed by R. P. A. Johnson, Surveyor - Draftsman
[Forest Service Title.]

Under special instructions dated September 23, 1915

Survey commenced November 28, 1915

Survey completed November 28, 1915

Under Acts of June 11, 1906 and March 4, 1915

8—2349

76

OATH OF ASSISTANTS

We hereby certify that we assisted R P A Johnson Surveyor Draftsman [Forest Service Title.] in surveying all those parts or portions of Homestead Entry Survey No. 402, in the State of Arizona, which are represented in the following field notes as having been surveyed by him and under his direction; and that said survey has been in all respects, to the best of our knowledge and belief, well and faithfully surveyed, and the corner monuments established, according to the instructions furnished by the United States Surveyor General for Arizona

Note: It would have been very expensive and inconvenient to appear before an officer to administer oaths to Assistants; hence, they were taken by the Surveyor.

E S Beecht, Chainman

Douglas E Meister, Chainman

Subscribed and sworn to before me this fifteenth day of Decemba, 1915.

R P A Johnson

Surveyor Draftsman

OATH OF SURVEYOR

I, R P A Johnson Surveyor Draftsman [Forest Service Title.] do solemnly swear that, in strict conformity with the special instructions of the United States Surveyor General for Arizona, dated September 23 1915, and the laws of the United States, I have well, faithfully, and truly, in my own proper person, surveyed a tract of land embraced in

List patent, No. 3-3001, dated December 31, 1913, for , under the Act of June 11, 1906, the same to be known as Homestead Entry Survey No. 402, situated within the Tonto National Forest, in unsurveyed Sections 22 & 27, Township 11½N, Range 8E, and --surveyed Section -----, Township -----, Range ------,

of the Gila and Salt River Base and meridian, Arizona, and the related retracements and resurveys and section subdivisions, which are represented in the following field notes as having been surveyed by me; and I further solemnly swear that all the corners of said survey have been established and perpetuated in strict accordance with the stated special instructions, and in the specific manner described in the field notes, and that the following are the original field notes of such survey.

R P A Johnson

Surveyor Draftsman [Forest Service Title.]

Subscribed and sworn to before me this 24th day of March, 1916.

SEAL.

Elsie C. Myers

Notary Public

8—2349

My Commission expires April 20, 1918.

Form 85.
Sheet No. 2.

HOMESTEAD ENTRY SURVEY NO. 402 -1.

TONTO NATIONAL FOREST

STATE OF ARIZONA

Chains

Applicant for listing, Robert Peach; Application No. 391, dated February 24, 1913; List No. 3-3001, dated December 31, 1913; H. E. 025227, made in the Phoenix Land Office on June 3, 1914 by Robert Peach.

Surveyed under special instructions from the Surveyor General for Arizona, dated September 23, 1915 and designated as Homestead Entry Survey No. 402.

Situated in unsurveyed T. 11-1/2 N., R. 8 E., in what will probably be, when surveyed, Secs. 22&27 Gila and Salt River Base and Meridian, Tonto National Forest, Arizona.

Surveyed under the Acts of June 11, 1906 and March 4, 1915.

Survey commenced November 28, 1915, and executed with a Buff and Buff transit No. 9700-6.

I test the adjustments of the transit and make necessary corrections.

All measurements were made directly on the slope with a 500 link steel tape. The slope angles were determined with a clinometer. Horizontal distances only appear in these notes.

At 2h. 09m. p.m., l.m.t., I observe the altitude of the sun for azimuth at cor. H-3 of the list survey. The reading on the reference object was set at zero and the sun was observed in the upper left and lower right quadrants of the field. My watch is set for local mean time. Latitude 34° 21' 54" N., Long. 111° 31' 04" W., from special instructions from the Surveyor General.

HOMESTEAD ENTRY SURVEY NO. 402

TONTO NATIONAL FOREST

STATE OF ARIZONA

Chains	Telescope	Time	Horizontal Angle	Vertical Angle
	Direct	2h. 08m. 43s.	37° 57' 00"	24° 11' 00"
	Reversed	2h. 09m. 35s.	37° 33' 00"	24° 46' 00"

Bearing of reference mark, N. 0° 13' 27" W.

At 3h. 19.9m. p.m., l.m.t., I again observe the altitude of the sun for azimuth at cor. No. 4 of this survey, hereinafter described. The reading on the reference object, which is in the meridian brought forward from obsn. at cor. H-3, is set at zero and the sun was observed in the upper left and lower right quadrants of the field. Lat. 34° 22' N. Long. 111° 31' 26" W.

Telescope	Time	Horizontal Angle	Vertical Angle
Direct	3h. 19m. 29s.	51° 28' 30"	14° 00' 00"
Reversed	3h. 20m. 25s.	51° 05' 30"	14° 24' 30"

Bearing of reference object is N. 0° 00' 26" E., which checks the meridian previously determined within less than a half minute. I therefore assume the meridian as brought forward to be correct, and to which all the courses of this survey are referred.

November 28, 1915.

Beginning at Cor. No. 1.

Identical with cor. H-4 of the list survey, which is a malpais stone 14 x 6 x 9 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a stone 6 x 4 x 2 ins. marked with a +, 18 ins. in the ground, over which set a malpais stone 28 x 6 x 6 ins. chiseled + for the point and 1 - H E S 402 on S. face; and

Chains	
	raise a mound of stone 3 ft. base, 2 ft. high, S. of cor., whence:
	A juniper, 12 ins. dia., bears S. 33° 48' E., 163 lks. dist., blazed and scribed 1 H E S 402 + B T.
	A juniper, 16 ins. dia., bears N. 3° 05' E., 253 lks. dist., blazed and scribed 1 H E S 402 + B T.
	Cor. for secs. 32 and 33, on S. bdy. T. 12 N., R. 8 E., which is a 2 in. iron post with brass cap, marked and witnessed as described by the Surveyor General, bears N. 17° 02' E., 48.25 chs. dist., by traverse which appears at the end of these notes.
	Lat. 34° 22' 06" N., Long. 111° 31' 11" W., by account from special instructions from Surveyor General, and later verified.
	Mag. decl. at 1 p.m., 14° 30' E. Mean mag. decl., 14° 32' E.
	Thence S. 24° 46' E.
	In open, over level land.
17.70	Fence, bears NE. and SW.
20.64	To cor. No. 2.
	Identical with cor. H-3 of the list survey, which is a malpais stone 12 x 10 x 16 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor. Deposit a stone 3 x 3 x 3 ins. marked with a +, 14 ins. in the ground, over which set a malpais stone 24 x 12 x 5 ins., chiseled + for the point and 2 - H E S 402 on W. face; and raise a mound of stone 3 ft. base, 2 ft. high, W. of cor., whence:

HOMESTEAD ENTRY SURVEY NO. 402

TONTO NATIONAL FOREST

STATE OF ARIZONA

Chains	
	A juniper, 14 ins. dia., bears S. 26° 55' E., 117 lks. dist., blazed and scribed. 2 H E S 402 + B.T.
	An oak, 8 ins. dia., bears S. 83° 20' W., 193 lks. dist., blazed and scribed 2 H E S 402 + B.T.
	Thence S. 66° 52' W.
	In open, over level land.
7.08	Fence, bears NE. and SW.
13.57	Button Wash, 43 lks. wide, 3 ft. deep, course S.
14.05	Enter edge of cultivated land, bears NNE. and WSW.
16.50	Leave cultivated land, bears NW. and SE.
20.56	To cor. No. 3.
	Identical with cor. H-2 of the list survey, which is a malpais stone 14 x 12 x 10 ins. above ground, marked and witnessed as described by the Forest Service. I destroy all trace of this list cor.. Deposit a stone 3 x 2 x 2 ins. marked with a +, 18 ins. in the ground, over which set a malpais stone 28 x 10 x 4 ins., chiseled + for the point and 3 - H E S 402 on N. face; and raise a mound of stone 3 ft. base, 2 ft. high, N. of cor., whence:
	A juniper, 7 ins. dia., bears N. 56° E., 123 lks. dist., blazed and scribed 3 H E S 402 + B T.
	A juniper, 10 ins. dia., bears S. 12° 18' E., 85 lks. dist., blazed and scribed 3 H E S 402 + B T.
	Thence N. 23° 46' W.
	In open, over level land.

Chains	
20.26	To cor. No. 4. At fence cor. Fence bears NE. and SE. Deposit a stone 3 x 2 x 2 ins. marked with a +, 14 ins. in the ground, over which set a malpais stone 24 x 12 x 4 ins. chiseled + for the point and 4 - H E S 402 on E. face; and raise a mound of stone 3 ft. base, 2 ft. high, E. of cor., whence: A juniper, 75 ins. dia., bears S. 52° 27' E., 12 lks. dist., blazed and scribed 4 H E S 402 + B T. A juniper, 10 ins. dia., bears S. 18° 09' W., 198 lks. dist., blazed and scribed 4 H E S 402 + B T. Cor. H-1 of the list survey, which is a juniper, 75 ins. dia., marked and witnessed as described by the Forest Service, bears S. 52° 27' E., 12 lks. dist. I destroy all trace of this list cor.
	Thence N. 65° 50' E. In open, over level land.
15.20	Fence, bears NNW. and SSE.
18.06	Button Wash, 5 lks. wide, 1 ft. deep, course S.
20.21	To cor. No. 1, the place of beginning.

AREA

Total Area - - - - - - - - - - - - - - - - - 41.67 acres.

37

Form 85.
Sheet No. 2. 6.

HOMESTEAD ENTRY SURVEY NO. 402

TONTO NATIONAL FOREST

STATE OF ARIZONA

Chains

IMPROVEMENTS

The improvements made upon and for the benefit of this claim, and belonging to the claimant, consist of the following:

An uncompleted log dwelling, 24 x 12 ft., the long side of which bears NE. and SW. and the S. cor. of which bears N. 10° 59' W., 2.40 chs. dist. from cor. No. 3.

Value ---------- $100.00

There is approximately 1-1/4 miles of wire fencing.

Value ---------- $100.00

DESCRIPTION.

This claim is situated on Hardscrabble Mesa, three miles South of Mogollon Rim and near the head of Button Wash. The tract is part of an open level mesa lying at an elevation of 6100 ft. The general slope is to the North and is slight.

The soil is shallow sandy loam, sprinkled with small malpais boulders. It is tillable and may produce crops without irrigation when cultivated.

There is no water for any purpose and water for domestic use is hauled from Strawberry, 3 miles dist.

There are two acres of cultivated land on tract.

There is no timber on the claim.

I saw no indication of mineral upon this claim.

CONFLICTS AND ADJOINING CLAIMS

There are no conflicting or adjoining claims.

Strawberry, the nearest settlement, is 3 miles to North,

H E S 134 lies northeasterly about one mile dist.

H E S 133 lies southwesterly about 1-3/4 miles dist.

Chains

and Pine, the nearest post office, is 5 miles East. Both are reached by poor road.

Flagstaff, the nearest railroad point, is 90 miles to North and over mountain road.

TRAVERSE

Cor.	Course	Dist.	N	S	E	W
1-2	S. 24° 46' E.	20.64		18.74	8.65	
2-3	S. 66° 52' W.	20.56		8.08		18.91
3-4	N. 23° 46' W.	20.26	18.54			8.17
4-1	N. 65° 50' E.	20.21	8.27		18.44	
		81.67	26.81	26.82	27.09	27.08
				26.81	27.08	
Error in Lat. and Dep.				.01	.01	

Closing error, 1:5776.

Survey completed November 28, 1915.

R. P. A. Johnson

Surveyor - Draftsman

34

Form 85.
Sheet No. 2.

HOMESTEAD ENTRY SURVEY NO.

NATIONAL FOREST

STATE OF

Chains

35

HOMESTEAD ENTRY SURVEY NO. 402

TONTO NATIONAL FOREST

STATE OF ARIZONA

Chains

Direct Solar at Cor. No. 4, November 28, 1915.

Lat. 34° 22' N., Long. 111° 31' 26" W. Elev. 6100 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	3h. 19m. 29s.	51° 28' 30"	14° 00' 00"	o+
Reversed	3h. 20m. 25s.	51° 05' 30"	14° 24' 30"	+o
Mean	3h. 19m. 57s.	51° 17' 00"	14° 12' 15"	
	7h. 26m. 06s.		03' 01"	
	10h. 46m. 03s.		14° 09' 14"	

Decl. 21° 15' 15" S.

$$\text{Cos. Q.} = \frac{\text{sin. } 21° 15' 15"}{\text{cos. } 34° 22' \times \text{cos. } 14° 09' 14" \quad \text{tan. } 34° 22' \times \text{Tan. } 14° 09' 14"}$$

log. sin. 21° 15' 15" = + 9.559315
log. cos. 34° 22' 00" = + 9.916687
log. cos. 14° 09' 14" = - 9.986612
9.656016 = log. .45291

log. tan. 34° 22' 00" = 9.834967
log. tan. 14° 09' 14" = 9.401715
9.236682 = log. .17246

Cos. Q. = .62537
Q. = 51° 17' 26"

Bearing of reference object, N. 0° 00' 26" E.

Direct Solar at cor. No. 2, November 28, 1915.

Lat. 34° 21' 54" N., Long. 111° 31' 04" W. Elev. 6100 ft.

Telescope	Time	Horizontal Angle	Vertical Angle	Pos. Sun
Direct	2h. 08m. 43s.	37° 57' 00"	24° 11' 00"	o+
Reversed	2h. 09m. 35s.	37° 33' 00"	24° 46' 00"	+o
Mean	2h. 09m. 09s.	37° 45' 00"	24° 28' 30"	
	7h. 26m. 04s.		01' 42"	
	9h. 35m. 13s.		24° 26' 48"	

Decl. 21° 14' 43" S.

$$\text{Cos. Q.} = \frac{-\text{ sin. } 21° 14' 43"}{\text{Cos. } 34° 21' 54" \times \text{cos. } 24° 26' 48" \quad \text{tan. } 34° 21' 54" \times \text{tan. } 24° 26' 48"}$$

log. sin. 21° 14' 43" = + 9.559142
log. cos. 34° 21' 54" = - 9.916696
log. cos. 24° 26' 48" = - 9.959206
9.683240 = log. .48221

log. tan. 34° 21' 54" = 9.834940
log. tan. 24° 26' 48" = 9.657632
9.492572 = log. .31087

Cos. Q. = .79308
Q. = 37° 31' 33"

Bearing of reference object, N. 0° 13' 27" W.

36

Form 85.
Sheet No. 2.

HOMESTEAD ENTRY SURVEY NO.

NATIONAL FOREST

STATE OF

Chains

Form 85.
Sheet No. 3.—Revised Feb., 1915.

DIRECTIONS.—1. Carry out calculations to two decimals only.
2. In balancing Latitudes and Departures do not obliterate or change the original figures.
Put the corrected figure or figures above in red ink. Do not change the footing of the original figures, but put below them the corrected footing in red ink.
The corrections for balancing fallings should be proportional to the lengths of the lines.
3. In calculations of fallings take result to nearest link. In calculations of N. and S. areas drop all after second decimal. Surveyors are required to use the Standard Field Tables issued by the G. L. O.
4. Only three copies of this tabulation are necessary, for the District Office, the Surveyor General, and the Commissioner.

8—2349

TABLING AND CALCULATIONS OF HOMESTEAD ENTRY SURVEY NO. 402, STATE OF Arizona.

CORNERS.	BEARING.	DISTANCE.	LATITUDES. North.	LATITUDES. South.	DEPARTURES. East.	DEPARTURES. West.	DOUBLE M. D.	N. AREAS.	S. AREAS.
1-2	S. 24° 46' E.	20.64		18 74 (73)	8 65 (64)		45 52		852 59
2-3	S. 66° 52' W.	20.56		8 08		18 91	35 25		284 82 ✓
3-4	N. 23° 46' W.	20.26	18 54			8 17	8 17	151 47 ✓	
4-1	N. 65° 50' E.	20.21	8 27		18 44		18 44	152 50 ✓	
		81.67	26 81	26 82	27 09	27 08		303 97	1137 41
			26 81	26 81	27 08	27 08			303 97
									833 44
Closing error, 1:5776.									41 67 Acres.
	Tie from cor. No. 1 to cor. for secs. 32 and 33, T. 12 N., R. 8 E.								
1-Tp.	N. 42° 28' E.	8.05	5 94 ✓		5 44 ✓				
Tp.-Tp.	N. 14° 13' E.	39.58	38 37 ✓		9 72 ✓				
Tp.-Sec.Cor.	N. 29° 28' W.	2.09	1 82			1 03			
			46 13	0 00	15 16	1.03			
			0 00		1 03				
			46 13		14 13				
Therefore cor. for secs. 32 and 33 bears N. 17° 02' E., 48.25 chs. dist.									

37

EMH

Form 85
Sheet No. 4

39

APPROVAL

Office of the United States Surveyor General,

Phoenix, Arizona, June 19 , 1917.

The foregoing field notes of Homestead Entry Survey No.

402

executed by R.P.A.Johnson, Surveyor-Draftsman
[Forest Service Title.]
under his special instructions, dated September 23 , 1915, having been critically examined, and the necessary corrections and explanations made, the said field notes, and the surveys they describe, are hereby approved.

Frank P. Trott
U. S. Surveyor General.

I certify that the foregoing transcript of the field notes of the above-described survey in the State of Arizona , has been correctly copied from the original notes on file in this office.

Frank P. Trott
U. S. Surveyor General.

8—2349