

RICH'D PATTEN & SON,

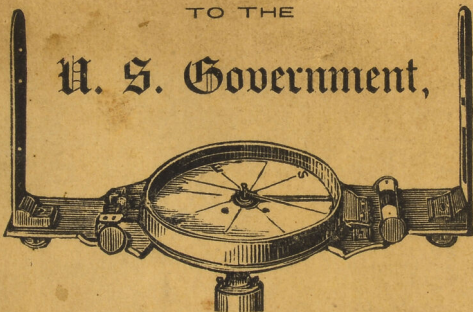
Manufacturers of

ENGINEERS'

INSTRUMENTS

TO THE

U. S. Government,



No. 58 BALTIMORE ST.

BALTIMORE, MD.

RICHARD PATTEN & SON,

Manufacturers of

ENGINEERS'

INSTRUMENTS

TO THE

U. S. Government,

No. 23 SOUTH STREET,

BALTIMORE, MD.

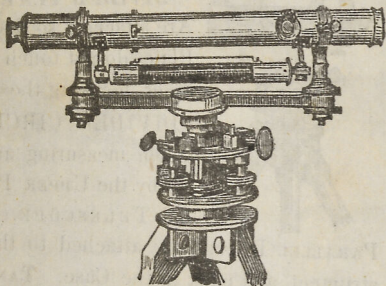
“THE PRINTING OFFICE,”

SUN IRON BUILDING, BALTIMORE.

1852.

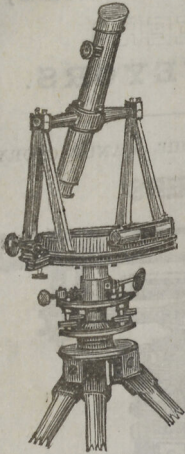
TO
RAILROAD COMPANIES,
ENGINEERS
AND SURVEYORS.

We have for sale, at our MANUFACTORY,
ENGINEERS'



Of a superior quality, with long BELL METAL
CENTRES, DETACHED PARALLEL PLATES, to
pack in the Case, thereby securing the safety
of the TANGENT SCREWS, &c., in transport-

ing the Instrument. The TELESCOPES are of the best quality, the bubbles truly ground, &c.



OUR
TRANSITS

HAVE LONG
BELL-METAL CENTRES,

TO WHICH THE

DIVIDED PLATES

Are attached, so that the
Plates do not touch each
other, nor drag the

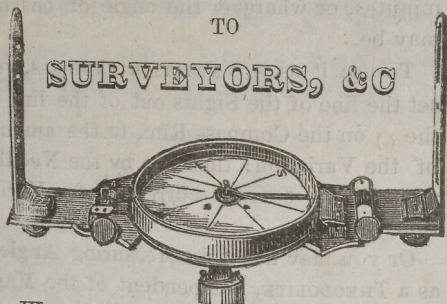
DIVIDED CIRCLE,

When measuring an an-
gle by the **UPPER PLATE**
and **TELESCOPE**. The

PARALLEL PLATES are attached to the In-
strument, and pack in the Case. **TANGENT**
SCREWS, for Slow Motion, &c.

We have three patterns of these TRAN-
SITS—one, the **BOX TRANSIT**, in which the
divisions on the Arch and **Vernier** are co-

vered, and read through a piece of plate glass. The others have open Arches, and are divided on Silver; all read to ONE MINUTE OF A DEGREE, are of the best workmanship, and warranted perfect in all respects.



We make a variety of these Instruments.
The best are what is called the

Theodolite Compass,

For measuring angles, with or without the
Magnetic Needle. The Sight revolves

around an Arch of Silver, on the outside of the Compass Box, furnished with Clamp and Tangent Screws, for Slow Motion. In measuring angles from the Magnetic Meridian, you set the Needle at (0) on the Compass Rim, then turn the Sights to the object, when you get the bearing to single minutes, or whatever the angle or bearing may be.

To use it as a VARIATION COMPASS, you set the line of the Sights out of the line of the (0) on the Compass Rim, to the amount of the Variation; then run by the Needle, with all the courses corrected for Variation, &c.

Or you may use it for Measuring Angles, as a THEODOLITE, independent of the Magnetic Needle.

This is the

MOST PERFECT COMPASS,
For an ENGINEER or SURVEYOR, ever made.

WE MANUFACTURE

EVERY INSTRUMENT

REQUIRED BY

ENGINEERS,

For Railroad and other Purposes,

And have for sale a GENERAL ASSORTMENT
of every thing in that line of business.

PRICES.

Theodolites, from	\$350 to \$150
Railroad Transits, from	150 " 120
Leveling Instruments, Tripods, &c., complete, from	150 " 120
Theodolite Compasses, with Tri- pod, from	100 " 80
Surveyor's Compasses, for Va- riation, with Vernier, to read to minutes, from	60 " 40

Plain Compass, 7 inch face, from	\$45 to	\$40	
“ “ 6 “ “	40	“	30
“ “ 5 “ “	35	“	28
“ “ 4 “ “	33	“	25
“ “ 3½ “ “	25	“	20
Slope Levels, for Railroads,	25	“	20
Hanging Levels, from	35	“	15
Prismatic Compass,			25
Cases of good Plotting In-			
struments,	from \$15 00 to	\$3 00	
Superior do. from	100 00	“	25 00
Best 100 feet U. S. Standard			
Chains, from	12 00	“	7 50
50 Feet do. “	7 50	“	5 00
4 Pole Chain,	5 00	“	3 00
2 “ “	3 00	“	2 00
Targets for leveling,			5 00
12 Feet Rods,			7 50
10 “ “			5 00
40 “ “			to minutes from