

REPORT ON TENSILE TESTS OF FORTY-FOUR WROUGHT IRON BARS—continued.

| U. C. L. Test Number. | Marks on Piece. | Dimensions. | | Limit of Elasticity. | | Breaking Load. | | Ratio of Limit to Break | Extension on 10 Inches. | Reduction of Area at Fracture. | Extension on 3 Inches at Fracture. | Remarks. | |
|-----------------------|-----------------|--------------------------------|------------|----------------------|-------------------|--------------------|-------------------|-------------------------|-------------------------|--------------------------------|------------------------------------|---|--|
| | | Breadth. | Thickness. | Pounds. | Tons. | Pounds. | Tons. | | | | | | |
| | | HALF-INCH BARS. | | | | | | | | | | | |
| 7,618 | K. A. A. | .480 in. (Tested as received.) | .485 in. { | Per sq. in. 36,510 | Per sq. in. 16.30 | Per sq. in. 57,450 | Per sq. in. 26.65 | .636 | Per cent. 22.0 | Per cent. 43.6 | 29.7 | Silky, about 8 per cent. finely crystalline. | |
| 7,619 | " | .443 in. Diameter. | .443 in. { | 41,140 | 18.36 | 60,740 | 27.11 | .677 | 19.6 | 41.1 | 26.7 | Silky, about 10 per cent. crystalline. | |
| 7,620 | " | .441 in. Diameter. | .453 in. { | 41,630 | 18.58 | 58,770 | 26.23 | .708 | 21.9 | 44.0 | 29.7 | Silky, specks of crystal. | |
| 7,621 | " | .485 in. (Tested as received.) | .481 in. { | 38,040 | 16.98 | 57,340 | 25.60 | .663 | 23.7 | 46.8 | 33.3 | Silky. | |
| 7,622 | " | .447 in. Diameter. | .457 in. { | 40,030 | 17.87 | 59,270 | 26.46 | .675 | 20.3 | 39.4 | 23.3 | Silky, specked with crystal. | |
| 7,623 | " | .481 in. (Tested as received.) | .481 in. { | 39,260 | 17.52 | 57,800 | 25.80 | .679 | 18.5 | 30.7 | 23.3 | Silky, slightly reedy; broke just at Inspector's stamp. | |
| 7,624 | " | .447 in. Diameter. | .457 in. { | 40,150 | 17.92 | 60,290 | 26.91 | .666 | 19.8 | 42.1 | 28.0 | Silky. | |
| 7,625 | " | .477 in. (Tested as received.) | .481 in. { | 36,180 | 16.15 | 60,050 | 26.81 | .602 | 24.1 | 45.1 | 32.0 | Silky. | |
| 7,626 | " | .445 in. Diameter. | .456 in. { | 40,400 | 18.04 | 61,350 | 27.39 | .659 | 19.0 | 38.8 | 24.7 | Silky, about 8 per cent. crystalline. | |
| 7,627 | " | .481 in. (Tested as received.) | .480 in. { | 40,820 | 18.22 | 59,120 | 26.39 | .690 | 21.2 | 34.8 | 23.7 | Silky, about 15 per cent. crystalline. | |
| 7,628 | " | .445 in. Diameter. | .456 in. { | 41,800 | 18.66 | 58,400 | 26.07 | .716 | 17.9 | 41.6 | 24.0 | Silky, specked with crystal. | |
| 7,629 | " | .482 in. (Tested as received.) | .481 in. { | 39,350 | 17.57 | 58,750 | 26.23 | .670 | 23.8 | 38.4 | 29.3 | Silky. | |
| 7,630 | " | .443 in. Diameter. | .456 in. { | 37,430 | 16.71 | 56,590 | 25.26 | .661 | 21.5 | 49.9 | 27.7 | Silky. | |
| 7,631 | " | .485 in. (Tested as received.) | .483 in. { | 38,730 | 17.29 | 55,910 | 24.96 | .693 | 25.1 | 46.2 | 32.7 | Silky. | |
| 7,632 | " | .447 in. Diameter. | .457 in. { | 45,640 | 20.37 | 62,600 | 27.94 | .729 | 21.9 | 47.2 | 30.0 | Silky. | |
| 7,633 | " | .483 in. (Tested as received.) | .481 in. { | 42,300 | 18.88 | 61,020 | 27.24 | .693 | 19.1 | 42.4 | 25.0 | Silky, a surface-blister on one side. | |
| 7,634 | " | .480 in. (Tested as received.) | .485 in. { | 36,510 | 16.30 | 55,700 | 23.97 | .680 | 13.3 | 23.5 | 15.7 | Silky, a little reedy; broke across Inspector's stamp. | |
| 7,635 | " | .443 in. Diameter. | .454 in. { | 40,240 | 17.96 | 56,330 | 25.15 | .714 | 17.7 | 35.4 | 23.3 | Silky, a blister on surface. | |
| 7,636 | " | .447 in. Diameter. | .457 in. { | 40,230 | 17.98 | 55,460 | 24.76 | .726 | 20.1 | 40.1 | 26.0 | Silky, slightly reedy. | |
| 7,637 | " | .486 in. (Tested as received.) | .486 in. { | 35,110 | 15.67 | 54,630 | 24.39 | .642 | 16.2 | 21.9 | 17.7 | Silky, slightly reedy. | |
| 7,638 | " | .447 in. Diameter. | .457 in. { | 38,750 | 17.30 | 56,470 | 25.21 | .686 | 18.8 | 42.1 | 25.7 | Silky. | |
| 7,639 | " | .482 in. (Tested as received.) | .484 in. { | 37,400 | 16.70 | 54,760 | 24.45 | .683 | 23.9 | 44.1 | 30.0 | Silky. | |

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