papers in the Philoſophſeal Transactions for 1782, 1784, and 1786.

As Mr Wedgwood’s thermometer begins at the lowest degree of ignition, and Fahrenheit’s goes no higher than the boiling point of mercury, Mr Wedgwood continued to fill up the interval of the ſcale by uſing a piece of ſilver inſtead of his common thermometer pieces ; and in this way he has found out that 130 degrees of Fahrenheit are equal to one of his. He has accordingly, by obſerving this proportion, continued Fahrenheit’s ſcale to the top of his own. We are now therefore enabled to give a ſcale of heat from the higheſt degree of heat produced by an air furnace to the greateſt degree of cold hitherto known, which was pro­duced at Hudſon’s Bay in December 1784 by a mixture of vitriolic acid and snow. Of the remarkable degrees between theſe extreme points we ſhall now lay before our readers a ſcale.

|  |  |  |
| --- | --- | --- |
|  | Fahrenheit’s ſcale. | Wedgwood’s ſcale. |
|  |
| Extremity of Wedgewood’s ſcale | 32277⁰ | 240⁰ |
| Greateſt heat of his small air-furnace | 21877 | l60 |
| Caſt iron melts | 17977 | 130 |
| Greateſt heat of a common ſmith’s forge | 17327 | 125 |
| Welding heat of iron, greateſt | 13427 | 95 |
| leaſt | 12777 | 90 |
| Fine gold melts | 5237 | 32 |
| Fine silver melts | 4717 | 28 |
| Swediſh copper melts | 4587 | 27 |
| Brass melts | 3807 | 21 |
| Heat by which his enamel colours ; burnt on | are  1857 | *6* |
| Red-heat fully visible in day-light | 1077 | 0 |
| Red-heat fully visible in the dark | 947 | I |
| Mercury boils, alſo lintſeed and other expressed oils | 600 |  |
|
| Oil of turpentine boils | 560 |  |
| Sulphuric acid boils | 546 |  |
| Lead melts - - | 540 |  |
| Biſmuth melts | 46© |  |
| Tin melts | 408 |  |
| Sulphur melts | 244 |  |
| Nitrous acid boils | 242 |  |
| Cows milk boils | 213 |  |
| Water Boils | 212 |  |
| Human urine boils | 206 |  |
| Brandy boils | 190 |  |
| Alcohol boils | 174 |  |
| Serum of blood and white of eggs harden | 156 |  |
| Bees wax melts | 142 |  |
| Heat of the air near Senegal ſometimes | 111 |  |
| Hens hatch eggs about | 108 |  |
| Heat of birds from | 103 | to 111 |
| Heat of domeſtic quadrupeds from | 100 | to 103 |
| Heat of the human body | 92 | to 99 |
| Heat of a ſwarm of bees | 97 |  |
| Heat of the ocean under the equator | 80 |  |
| Butter melts | 74 |  |
| Vitriolic acid of the ſpecific gravity of 1780 freezes at | 45 |  |
|
| Oil of olives begins to congeal | 43 |  |
| Heat of hedgehogs and marmots in a torpid ſtate | *39½* |  |
|
| Water freezes and ſnow melts | 32 |  |
| Milk freezes | 30 |  |
| Urine and common vinegar freezes | 2'8 |  |
| Human blood freezes | *25* |  |
| Strong wines freeze | 20 |  |

|  |  |
| --- | --- |
|  | Fahrenheit’s ſcale, |
| A mixture of one part of alcohol and three parts of water freezes | 7 |
|
| A mixture of ſnow and ſalt freezes | 0 to 4 |
| Brandy, or a mixture of equal parts of alcol and water, freezes | — 7 |
|
| Spirit of wine in Reaumur’s thermometer froze at Torneo | — 34 |
|
| Mercury freezes | — 39 or 40 |
| Cold produced by Mr Macnab at Hudſon's Bay by a mixture of vitriolic acid and ſnow | — 69 |
|
|

THERMOPYLÆ, (anc. geog.) ; a narrow paſs or defile, between the waſh of the Sinus Maliacus ; on the eaſt and ſteep mountains, reaching to Oeta, made dreadful by unpassable woods; on the west, leading from Thessaly to Locris and Bœotia. Theſe mountains divide Greece in the middle, in the ſame manner as the Apennine does Italy; forming one continued ridge from Leucate on the west to the ſea on the eaſt, with thickets and rocks interſperſed ; that perſons even prepared for travelling, much leſs an army en­cumbered with baggage, cannot eaſily find a commodious paſſage. In the valley verging towards the Sinus Maliacus, the road is only ſixty paces broad ; the only military way for an army to paſs, if not obstructed by an enemy ; and therefore the place is called *Pylae,* and by others, on ac­count of its hot water, *Thermopylae.* Ennobled by the brave ſtand made by Leonidas and three hundred Spartans againſt the whole army of Perſia ; and by the bold reſolution of blind Euthycus, chooſing rather to fall there in fight, than return to Sparta, and eſcape the common danger. Famous alſo for the Amphyctiones, the common council or ſtates general of Greece, aſſembling there twice a year, ſpring and autumn. For an account of the battle of Thermopylae at which Leonidas with a handful of men engaged the Perſian army, ſee Sparta.

THESEA, in antiquity, feaſts celebrated by the Athe­nians in honour of Theſeus, conſiſting of ſports and games, with mirth and banquets ; ſuch as were poor and unable to contribute to them were entertained at the public ex­pence

THESEUS, a famous hero of antiquity ranked among the demi-gods, whoſe hiſtory is fabulous. He was the re­puted ſon of Ægeus king of Athens. He threw Sciron, a cruel robber, down a precipice ; faſtened Procruſtes tyrant of Attica to a bending pine, which being let looſe tore him asunder ; killed the Minotaur kept in the labyrinth by king Minos, in Crete ; and by the aſſiſtance of that prince’s daughter, Ariadne, who gave him a clue, eſcaped out of that labyrinth, and ſailed with his deliverer to the iſle of Naxos, where he had the ingratitude to leave her.

Theſeus afterwards overcame the Centaurs, ſubdued the Thebans, and defeated the Amazons. He aſſiſted his friend Pirithous in his expedition to the infernal regions to carry off Proſerpine ; but was impriſoned by Pluto, till he was releaſed by Hercules. He is alſo ſaid to have eſtabliſhed the Iſthmean games, in honour of Neptune ; to have united the twelve cities of Attica ; and to have founded a re­public there, 1236 B. C. Some time after, taking a voyage into Epirus, he was ſeized by Aidonius king of thc Moloſſians ; meanwhile Meneſtheus rendered himſelf maſter of Athens. But at length Theſeus being releaſed from priſon, retired to Scyros, where king Lycomedes cauſed him to be thrown from the top of a rock. Theleus had ſeveral wives ; the firſt of whom was Helena the daughter of Tyndarus ; the ſecond, Hypolita queen of the Amazons; and the laſt, Phedra ſiſter to Ariadne, who puniſhed him