**CHAPTER 19 A Wheen first Values**

"Fit's the maitter?" speired Kemp, fin the Inveesible Chiel lat him in.

"Naethin," wis the repon.

"Bit, loshty! The knell?"

"Ootbrakk o roose," quo the Inveesible Chiel. "Forgot this airm; an it's sair."

"Ye’re raither liable tae thon."

"I am."

Kemp wauked ben the chaumer an pyked up the bitties o brukken glaiss. "Aa the facks are oot aboot ye," quo Kemp, staunin up wi the glaiss in his haun; "aa that happened in Iping, an doon the knowe. The warld his becam awaur o its inveesible citizen. Bit naebody kens ye’re here."

The Inveesible Chiel banned.

"The secret's oot. I gaither it wis a secret. I dinna ken fit yer plans are, bit of coorse I'm keen tae help ye."

The Inveesible Chiel sat doon on the bed.

"There's brakkfaist upstairs," quo Kemp, spikkin as easy as possible, an he wis delichtit tae fin his fey guest raise willin. Kemp led the wey up the nerra staircase tae the belvedere.

"Afore we can dae onythin else," spakk Kemp, "I maun unnerstaun a bittie mair aboot this inveesibility o yours." He’d sat doon, efter ae jittery keek ooto the windae, wi the air o a chiel fa his newsin tae dae. His doots o the sanity o the hale maitter glimmered an vanished again as he luikit ower tae far Griffin sat at the brakkfaist-brod--a heidless, haunless dressin-goun, dichtin unseen lips on a byordnar upheld serviette.

"It's simple eneuch--an probable eneuch," quo Griffin, pittin the serviette aside an leanin the inveesible heid on an inveesible haun.

"Nae doot, tae ye, bit--" Kemp leuch.

"Weel, aye; tae me it seemed winnerfu at first, nae doot. Bit noo, loshty! ... Bit we’ll dae braw things yet! I cam on the gear first at Chesilstowe."

"Chesilstowe?"

"I gaed thonner efter I left Lunnon. Ye ken I drapped medicine an tuik up pheesics? Na; weel, I did. Licht chermed me."

"Ach!"

"Optical density! The hale subjeck is a wab o riddles—a netwirk wi results glimmerin feintly throwe. An bein bit twa-an-twinty an fu o virr, I quo, 'I’ll gie ma life tae thon. This is wirth while.' Ye ken fit gypes we are at twa-an-twinty?"

"Gypes syne or gypes noo," spak Kemp.

"As tho kennin could be ony satisfaction tae a chiel!

"Bit I gaed tae wirk--like a skiffie. An I’d scarce vrocht an thocht aboot the maitter sax months afore licht cam throwe ane o the meshes o a suddenty--blinninly! I fand a general principle o pigments an refraction--a formula, a geometrical expression involvin fower dimensions. Gypes, ordnar chiels, even ordnar mathematicians, dinna ken onythin o fit some general expression micht mean tae the scholar o molecular pheesics. In the buiks—the buiks thon gangrel his hidden--there are mervels, stammygasters! Bit this wisnae a method, it wis a notion, that micht lead tae a wey bi which it wid be possible, wioot cheengin ony ither property o matter--barrin, in some instances colours--tae lower the refractive index o a substance, solid or liquid, tae thon o air--sae far as aa practical purposes are consarned."

"Loshty!" quo Kemp. "Thon's fey! Bit still I dinna see quite ... I can unnerstaun that thereby ye could spyle a precious stane, bit personal inveesibility is a far cry."

"Exackly," reponed Griffin. "Bit conseeder, veesibility depens on the wirk o the veesible bodies on licht. Either a body takks in licht, or it reflecks or refracks it, or diz aa thon things. Gin it neither reflecks nur refracks nur absorbs licht, it canna o itsel be veesible. Ye see an opaque reid kist, fur instance, because the colour takks in some o the licht an reflecks the lave, aa the reid pairt o the licht, tae ye. Gin it didnae takk in ony partic’lar pairt o the licht, bit reflecked it aa, syne it wid be a sheenin fite kist. Siller! A diamond kist wid neither takk in muckle o the licht nur refleck muckle frae the general surface, bit jist here an thonner far the surfaces wir favourable the licht wid be reflecked an refracked, sae that ye wid get a braw sicht o flashin reflections an translucencies--a kinno skeleton o licht. A glaiss kist widnae be sae braw, nur sae clearly veesible, as a diamond kist, because there wid be less refraction an reflection. See thon? Frae

some pynts o view ye wid see richt clear throwe it. Some kinds o glaiss wid be mair veesible than ithers, a kist o flint glaiss wid be brichter than a kist o ordnar windae glaiss. A kist o verra thin ordnar glaiss wid be hard tae see in a coorse licht, because it wid takk in hardly ony licht an refrack an reflect verra little. An gin ye pit a sheet o ordnar fite glaiss in watter, still mair gin ye pit it in some denser liquid than watter, it wid vanish near aathegether, because licht passin frae watter tae glaiss is anely slichtly refracked or reflected or indeed affectit in ony wey. It’s near as inveesible as a skoosh o coal gas or hydrogen is in air. An fur jist the same rizzon!"

"Aye," quo Kemp, "thon’s gey plain sailin."

"An here’s anither fack ye’ll ken tae be true. Gin a sheet o glaiss is brukken, Kemp, an duntit intae a pooder, it becams much mair veesible while it’s in the air; it becams at the hinnereyn a see-throwe fite pooder. This is because the pooderin multiplees the surfaces o the glaiss at which refraction an reflection happen. In the sheet o glaiss there are anely twa surfaces; in the pooder the licht is reflected or refracted bi ilkie grain it passes throwe, an verra little gets richt throwe the pooder. Bit gin the fite poodered glaiss is pit intae watter, it straicht aff vanishes. The poodered glaiss an watter hae much the same refractive index; that is, the licht unnergaes verra little refraction or reflection in passin frae ane tae the ither.

"Ye makk the glaiss inveesible bi pittin it intae a liquid o near the same refractive index; a see-throwe ferlie becams inveesible gin it is pit in ony medium o near the same refractive index. An gin ye will conseeder anely a secunt, ye’ll see as weel that the pooder o glaiss micht be vrocht tae vanish in air, gin its refractive index could be vrocht the same as thon o air; fur then there wid be nae refraction or reflection as the licht passed frae glaiss tae air."

"Aye, aye," quo Kemp. "Bit a chiel's nae poodered glaiss!"

"Na," reponed Griffin. "He's mair see throwe!"

"Styte!"

"Thon frae a doctor! Foo a body forgets! Hae ye already forgotten yer pheesics, in ten years? Jist think o aa the ferlies that are transparent an seem nae tae be sae. Paper, fur instance, is vrocht up o transparent fibres, an it’s fite an opaque anely fur the same rizzon that a pooder o glaiss is fite an opaque. Ile fite paper, fill up the interstices atween the bittickies wi ile sae that there’s nae langer refraction or reflection barrin at the surfaces, an it becams as see-throwe as glaiss. An nae anely paper, bit cotton fibre, linen fibre, oo fibre, timmer fibre, an bane, Kemp, flesh, Kemp, hair, Kemp, nails and nerves, Kemp, in fack the hale makk o a chiel barrin the reid o his bluid an the blaik pigment o hair, are aa vrocht o see-throwe, colourless tissue. Sae little it takks tae makk us veesible ane tae the ither. Fur the maist pairt the fibres o a livin craitur are nae mair opaque than watter."

"Loshty!" cried Kemp. "Of coorse, of coorse! I wis thinkin anely last nicht o the sea larvae an aa jeely-fish!"

"Noo ye hae me! An aa that I kent an hid in mind a year efter I left Lunnon--sax years syne. Bit I keepit it tae masel. I’d tae dae ma wirk unner frichtfu drawbacks. Oliver, ma professor, wis a scientific scunner, a journalist bi instinck, a reiver o ideas—he wis aywis spyin! An ye ken the ill-daein system o the scientific warld. I simply widnae publish, an lat him share ma glory. I gaed on wirkin; I won nearer an nearer makkin ma formula intae an experiment, a reality. I telt nae leevin sowel, because I meant tae flash ma wirk upon the warld wi wechty effeck an becam famous at a cloor. I tuik up the maitter o pigments tae fill up certain gaps. An o a suddenty, nae bi design bit bi accident, I vrocht a discovery in physiology."

"Aye?"

"Ye ken the reid colourin maitter o bluid; it can be vrocht fite--colourless--an bide wi aa the functions it his noo!"

Kemp gaed a skreich o unca bumbazement.

The Inveesible Chiel raise an stertit waukin the wee study. "Ye micht weel cry oot. I mynd thon nicht. It wis late at nicht--in the daytime a body wis scunnered wi the gapin, gyte scholars--an I wirked syne whyles till dawn. It cam o a suddenty, gran an hale in ma harns. I wis alane; the laboratory wis still, wi the heich lichts burnin brichtly an seelently. In aa ma great meenits I hae bin alane. 'A body could makk a breet--a tissue—see throwe! Ane could makk it inveesible! Aa barrin the pigments--I could be inveesible!' quo I, o a suddenty jelousin fit it meant tae be an albino wi sic kennin. It wis owerpouerin. I left the filterin I wis daein, an gaed an glowered ooto the great windae at the starnies. 'I could be inveesible!' I repeatit.

"Tae dae sic a thing wid be tae transcend magic. An I saw,uncloodit bi doot, a braw veesion o aa that inveesibility micht mean tae a chiel--the mystery, the pouer, the freedom. Drawbacks I saw nane. Ye hae anely tae think! An I, a threidbare, puritith-strukk, hemmed-in demonstrator, larnin gypes in a kintra college, micht o a suddenty becam--this. I speir o ye, Kemp gin ye ... Onybody, I tell ye, wid hae flang himsel on thon research. An I wirked three years, an ilkie Ben o deeficulty I warssled ower shawed anither frae its summit. The eynless bitties! An the scunners! A professor, a kintra professor, ayweys spyin. 'Fan are ye gaun tae publish this wirk o yers?' wis his ongaun speirin. An the students, the owercroodit means! Three years I hid o it--

"An efter three years o secrecy an scunneration, I fand that tae feenish it wis impossible--impossible."

"Foo?" speired Kemp.

"Siller," quo the Inveesible Chiel, an gaed again tae glower ooto the windae.

He furled roun faist. "I reived frae the auld bodach--reived ma faither.

"The siller wisnae his, an he shot himsel."